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Application of a Percept-Genetic Test in a Clinical Setting

Vijai Prakash Sharma



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**Application of a Percept-Genetic Test
in a Clinical Setting**

av

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M.A., D.M. & S.P., Lund

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Evaluated the validity of a percept-genetic test, the Defense Mechanism Test (DMT), for assessment of disturbed self-organization and object-relations, using clinical data obtained from 27 adult psychotherapy patients through extensive interviews with their therapists, self-ratings by patients, ratings by therapists, transference behaviour and improvement criteria checklists. Predicted associations were, above all, observed between variables relating to the percept-genesis of the central figure in the DMT, on the one hand, and aspects of disturbed self-organization viz. traumatic self-experiences, disturbed self-image, and excessively used ego defenses, on the other. Q-factors, formed on the basis of such response characteristics as stimulus-adequate perception and perceptual distortions, differed with respect to central aspects of ego strength and defensive organization as measured by the transference behaviour, therapeutic success of the patients, criteria reflecting their adaptive abilities and defense mechanisms. It was concluded that DMT can be applied in clinical settings for assessing aspects of disturbed self-organization and environmental object-relations as well as for planning a tentative focus for psychotherapeutic work.

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Vijai Prakash Sharma



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PREFACE

This investigation was a collective endeavour by two therapists, patients, and myself to explore how perception is related to personality functioning. Many people have made a willing contribution to this endeavour. Due to my other commitments, all meetings were conducted during weekends or late evening hours.

APPLICATION OF A PERCEPT-GENETIC TEST

IN A CLINICAL SETTING

V.P. Sharma

I am a great admirer of the late Professor G.D. Bhatnagar, who was an excellent supervisor. He performed the "Genetic" role of "Genetic" research, preparing outlines, and making notes. Professor V.P. Singh, for the last several years has assisted me and made valuable suggestions in various aspects of this investigation. Colleagues like Mr. Shashi Bhattar, Mr. Anand Bhattar, Professor Hans J. Eysenck, and Dr. Jyoti Nair, were particularly helpful in clarifying many concepts, central to this work. If there are any faults or shortcomings in this work, they are of my own doing.

M. Bhatnagar and A. Bhatnagar also acted as co-judges for identification of the personality and self-variables, for which I am very grateful.

Mr. David Bhatnagar, Mr. George Bhatnagar, and Miss Bhatnagar have put in a great deal of work in editing and revising the manuscript.

I am most grateful to the Bhatnagar Institute of Mental Health for relieving me of my duties, even at the cost of disrupting the ongoing program of the Institute, in the interests of the completion of this report. A great acknowledgment from the Bhatnagar Institute and it people to denote the last few months in preparation of this report.

V.P. Sharma

1st Feb, 1977

APPLICATION OF A SHORT-TERM TEST
IN A CLINICAL SETTING

W. J. H. J. J. J.



PREFACE

This investigation was a collective endeavour by the therapists, patients, and myself to explore how perception is related to personality functioning. Many people have made a selfless contribution to this endeavour. Due to my other commitments, all testings were conducted during weekends or late evening hours. Patients, some of them from out of town, came at these odd days and hours for no monetary compensation. Therapists gladly gave of their precious time for our long interviews, complied with demands for objective measures, and put their process notes and clinical documents at my disposal.

I am in great debt to my supervisor, Professor Gudmund Smith, and to my assistant supervisor Bert Westerlundh, for performing the tripartite role of "average" readers, unsparing critics, and excellent adviser. Professor Ulf Kragh, for the last several years has advised me and made valuable suggestions on various aspects of this investigation. Discussions with Mr. Stefan Ballint, Mr. Anders Hallborg, Professor Hans Sjöbäck, and Dr Satya Maini, were stimulating and helped to clarify many concepts, central to this work. If there are any faults or shortcomings in this work, they are of my own doing.

S. Ballint and A. Hallborg also acted as co-judges for identification of the personality and DMT variables, for which I am very grateful.

Mr. David Hewitt, Mr. George Kozminski, and Miss Grazyna Dygdon have put in a great deal of work in editing and revising the manuscript.

I am most grateful to the B.M. Institute of Mental Health for relieving me of my duties, even at the cost of disrupting the ongoing programs of the Institute, in the interest of the completion of this report. A guest scholarship from The Swedish Institute made it possible to devote the last few months in preparation of this report.

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An Outline of Theories, Test and Methods

In clinical-psychological evaluation, the problem of how to make a more objective assessment of personality variables has been of continuous interest. This problem becomes particularly acute if the psychologist is not content with the measurement of overt traits by means of e.g., personality inventories.

Instead of referring to such traits, we are going to use Fairbairn's conceptual frame, in particular his notions of "endopsychic structure" and "dynamic factors" (Fairbairn 1966, pp. 82-132). The former consists of "ego-structures" and of "object-structures", and the latter consists of the libido and aggression. The interaction among the various structures is energized by libido and aggression. The total organization of the interplay between structures and the dynamic factors is termed the "dynamic structure of personality". The concept of the dynamic structure of personality is based on the postulates of the object-relations theory of personality (Fairbairn 1966, pp. 162-179).

The attempt in this investigation is to determine certain objective test-measures for assessing aspects of the dynamic structure of the personality. The structures selected are: the "self-organization" and the "object-relations". "Self-organization" will denote the individual's self-experience, his self-image and the status of his ego-functioning. Their relationship with the endopsychic structure will be discussed later. The "object-relations" refer to the basic patterns of the internalized as well as the external object-relations with parents and significant others.

The technique selected for the assessment of personality variables within this conceptual frame is a percept-genetic technique, notably the Defense Mechanism Test (DMT). This percept-genetic technique consists of analysis of serialized perceptual responses which enables the dynamic relationship between perception and personality to be studied.

The overall objective of the investigation is to examine the relationship between the clinical data pertaining to the personality variables mentioned above and the percept-genetic data

pertaining to the individual's perceptual experience of an incompatible interpersonal situation. The clinical data on patients is obtained from their therapists and the percept-genetic data is obtained by administering DMT to the same patients. The rationale for such comparison between the two sets of data is that the "dynamic structures", such as "self-organization" and the patterns of "object-relations" will become manifest in the percept-genetic data i.e., the DMT data related to the central figure, which would correspond to the representation of the self and the peripheral figure, which would correspond to the representation of the "objects".

This is a bold supposition on our part. In order to explain the reasoning behind this supposition we must briefly describe the following:

1. a) the DMT and b) the percept-genetic theory on which the test is based.

These two would qualify the assumptions underlying the variables of the percept-genetic data.

2. a) the object-relations theory and b) the working model of psychological evaluation largely based on the object-relations theory of the ego-structures and the object-structures.

These two would qualify the assumptions underlying the variables of the clinical data.

The Defense Mechanism Test (DMT)

A detailed presentation of the DMT will be made in the "Data Collection". Here, a brief account of the stimulus and the method is given in order to indicate the relevance of the test to personality evaluation in a clinical setting. The percept-genetic techniques study the relationship between perception and personality through a serialized perception of the same stimulus at various levels of stimulus awareness. Among the serial perceptual techniques the DMT by Kragh and the Meta-Contrast Technique (MCT) by Smith are identified as the "percept-genetic methods proper" (Kragh & Smith 1970, pp. 40-63).

The percept-genetic methods proper recognize that "ordinary perception" is the result of a development, which proceeds from

stimulus-distal stages to more and more stimulus-proximal ones (Kragh & Smith 1970, p. 38). In many conventional perceptual tests only the stimulus-proximal stages are examined, which due to the "over-dosage" of the stimulus, give insufficient information about the individual for the purpose of the personality analysis. It is expected that more information about the individual could be elicited from the stimulus-distal stages of the perception. The problem is how to examine the early stages of the perceptual development which are not discernible in ordinary perception. Percept-genetic methods attack this problem by "protracting" the perception with a tachistoscopic presentation of the stimulus through a series of increasing lengths of stimulus exposure. The process is called "stimulus fractioning" (Kragh & Smith 1970), i.e., to present the stimulus in fractions and not in one stroke.

The presentation time is serially increased from sub-threshold awareness of the stimulus until, if possible, the level of correct recognition is obtained. Thus, the perception of the stimulus is "split up" into discrete successive phases or stages (Kragh & Smith 1970, p. 21). The benefit of this process could be that the "searchlight of consciousness is directed towards parts of that process that normally, due to automatization, are preconscious and eliminated from the end-product of the perception" (Westerlundh 1976, p. 12).

Stimuli are devised to enable the analysis of the subject's percept-development with regard to an interpersonal threat-situation. Pictures with anxiety provoking content are presented by the tachistoscope in successively prolonged exposures. These pictures consist of a neutral central figure (i.e., the Hero, abbreviated as H) and a peripheral figure (i.e., the Secondary, abbreviated as S) who is visibly older and who has an aggressive and threatening expression, both facially as well as posturally. The central figure is shown possessing an attribute such as a toy car, a violin, a purse, etc. Male figures are shown to male subjects and female figures to female subjects. Referring to the Freudian concept of "threat/danger-anxiety and defense against anxiety", it is designed to induce defensive responses by means of subliminal perceptual threat. A complete testing includes up

to 20 exposures of each of two such pictures, exposed first at 10 ms. and thereafter for progressively longer periods until the final exposure of 2 seconds. Each time a picture is shown, the subject reports what he has seen by means of written and verbal reporting.

In this way, the perception of an emotionally discomforting interpersonal stimulus i.e., of the threat from the peripheral figure to the central figure, progresses from stimulus-distal phases to stimulus-proximal phases. The individual's perceptual distortions, eliminations, or additions to the threatening stimulus are then analysed in terms of his defensive processes, psychic conflicts, and previous experiences i.e., to the psychological development of the individual. Though a formalized evaluation and scoring system is available for assessment of the defenses, the remaining content for historical reference to the individual is analysed qualitatively. This analysis is generally carried out in individual cases.

From this, it would appear that the perceptual processes involved in DMT can provide information on in-depth psychological phenomena such as defenses, conflicts, experiences of the past, etc. These assumptions and their basis are outlined in the percept-genetic theory discussed below.

The Percept-Genetic Theory

Kragh and Smith (1970) have given an account of the major concepts and assumptions which form the basis of the percept-genetic theory. The concepts and assumptions which refer directly to the psychological aspects of perception-personality are highlighted to keep the presentation brief.

1. Perception and personality as an integral unit

The title is assigned by the investigator to include various concepts concerning the dynamic unity of perception and personality. Perception and personality are considered as a developmental unit or event occurring at a given time.

"In percept-genesis, perception is not seen as a reflection of object in the outer world, but as a process between the individual and the stimulus" (Westerlundh 1976, p. 11).

2. Parallelism between onto-genesis and the percept-genesis

It is assumed that there is a correspondence between an individual's life history and the sequence of reports to the tachistoscopic stimuli. "The process is stated to involve meaning hierarchies which determine seeing in such a way that the psychic structure formation^{1/} that has been established during the life-time of the individual is directly accessible in the series of reports" (Westerlundh 1976, p. 13). However, it may be stated in this connection, that the analysis of early developmental stages of perception will yield relatively greater information about the individual. The earlier stages convey a subjective and personal meaning of the stimulus, while the later stages convey the consensual meaning of the stimulus to the individual.

3. Correspondence between perceptual distortions and the defenses

Correspondence between the perceptual distortions, in terms of defense mechanisms in percept-genesis, and the activity underlying defenses, is elaborated under the following heading.

4. Determinants of the percept

Kragh and Smith (1970, pp. 13-39) have given an analysis of the determinants of the percept which account for the dynamic relationship between perception and personality. The five major determinants described by Kragh and Smith are: stimulus, reconstruction, cumulative and eliminative transformation, emergent transformations, and extrapolated determinants.

a) The stimulus

The stimulus is defined both at the physical and the psychological level. The physical level refers among other things to the physical properties or attributes of the stimulus. The psychological aspect refers to the consensual meaning of the stimulus to the individual. It may be appropriate to mention here, that the DMT stimulus at the personal-psychological level supposedly provokes the early anxieties in a two-person situation. The DMT pictures "are conceived

1/ Underlined by the investigator for emphasis. Theoretical projections regarding the psychic apparatus as a perceptual apparatus will be made later on the basis of the object-relations theory.

in relation to the Freudian theory of the Oedipus situation (see Freud's /1926/ discussion on typical anxiety situation)" (Westerlundh 1976, p. 14).

b) Reconstruction

Generally speaking, reconstruction is the process of making the constructed material conscious. It refers to the process of how an individual "selects and reports what cognitive schemes he applies to the material" (Westerlundh 1976, p. 17). The reconstruction is related to the fact, that in order to be recognized, the percepts have to be placed in a conceptual context.

Two groups of determinants are mentioned here:

- Defense mechanisms

The reconstruction of a percept is influenced in its overall development by defense mechanisms which are permanently active on the surface level. Even the temporary activation of defenses by experimental manipulation could affect the reconstruction (Bokander and Lindbom /1967/ cited from Westerlundh 1976, p. 17). As an extension of this reasoning, it may be stated, that the reconstruction of the percept by the patients who are hysterics, obsessives, depressives, etc., would differ, as these psychopathological conditions are supposedly related to certain characteristic defense constellations.

- Set

The "set" of the individual also affects the reconstruction of the percept. The "set" includes test-instructions, subjective perception of the testing situation, etc.

c) Cumulative and eliminative transformations

Personal meanings of a developing percept accumulate into modified percepts, whereas, some meanings are eliminated. These transformations provide an opportunity to study the self-experience through the percepts. According to Kragh and Smith (1970) "this nearly unlimited, multilevel condensation of meanings, events within the genesis of one single percept makes possible the representations of historical personality in present time. Moreover, here "the past" becomes directly

available to reliable experimental investigation" (p. 35).

d) Emerging transformations

New formations often emerge which cannot easily be understood except by reference to the individual's life history: "Thus, we shall partly have to refer to the subject's life history, notably in terms of crucial emotional significance, which become integrated with or super-imposed upon the existing mental structure" (Kragh & Smith 1970, p. 35). The emergent transformations suggest that there is a correspondence between the percept-genetic phases of an individual and life experiences. This phenomenon is referred to as a "micro-macro parallelism". According to Kragh and Smith (1970) "experiences are actualized in the present "micro-process" in the same order as they appeared in the "macro-process" of life" (p. 38).

The cumulative, eliminative, and emergent transformations are aspects of structural transformations of the percept and basic to the understanding of the personality through the sequential dynamic analysis of the percept-genesis.

e) Extrapolated determinants

These determinants refer to the hereditary and the physiological factors, the drives and their derivatives which "influence behaviour not only at the beginning of ontogenesis but also through each present perceptual process. In our model, we find it reasonable to refer these extrapolated determinants to the pre-threshold level" (Kragh & Smith 1970, p. 37).

In summation, the postulates of the percept-genetic theory on which the DMT is based suggest that the perceptual processes operating in a percept-genetic test yield information on the individual's personality, events of crucial emotional significance, and past experiences acquired in life-situations. Two concepts are underscored by the investigator for their relevance to the concept of "dynamic structure of personality" mentioned at the beginning:

1. The transformations of structure which determine the percept to a large extent.
2. The drives and their derivatives which intervene and influence

each perceptual process. Note that according to the percept-genetic theory this factor is "operation-extrinsic" and intervenes at the "pre-threshold level".

We will now present the object-relations theory and our working model for psychological evaluation and state the assumptions underlying the variables of the clinical data.

The Object-Relations Theory

The object-relations theory developed from the works of Freud, Klein, Fairbairn and Winnicott (Guntrip 1969, pp. 390-426). Freud (1929) said that "love seeks objects". It is evident from the statement that Freud considered object-relations fairly important but those were hardly conceived as important as determining the very drives and laying the foundation of the ego-development. The drives were in a way directionless and independent of the objects. According to Fairbairn "although Freud's whole system of thought was concerned with object-relationships he adhered theoretically to the principle that libido is primarily concerned with pleasure-seeking i.e., with the relief of its own tension" (Fairbairn 1966, p. 149). Freud conceived libido and aggression as forces which were originally in the nature of instincts. The object-relations theorists advanced the concept that the libido as well as the ego are object seeking, and the tension which demands relief is the tension of object seeking tendencies (Fairbairn 1966, p. 137-151).

The progress of Freud's thought led to a theory of personality conceived in terms of relationships between the ego and both the internal as well as the external objects. According to Fairbairn, "in such development, we detect the germs of an object-relations theory of personality, a theory based upon the conception that object-relationships exist within the personality as well as between the personality and the external objects" (Fairbairn 1966, p. 153). According to Fairbairn, Klein took a step further by ascribing an "ever increasing importance to the influence of internal objects in the development of the personality. Internal objects are "good objects, bad objects, benign objects, persecutory objects, whole objects, part objects, etc."

(Fairbairn 1966, p. 154). Klein led to the conception of endopsychic structure based on the personal object-relations. It then became possible to see how the internalized object-relations "partly realistically and partly in highly distorted ways reproduced the ego's relationships to personal objects in the real outer world" (Guntrip 1969, p. 407).

The object-relations theory with its full emphasis on the external and the internal object-relations was advanced by Fairbairn. Major features of the object-relations theory are listed as they marked a significant departure from the classical psychoanalytic theory:

1. Both libido and aggression are directed towards the objects.
2. The ego is directed towards the establishment of a satisfactory relationship with the objects.
3. The ego in the process of development splits into three egos: (I) a central ego /CE/ and the two subsidiary egos, which are (II) the libidinal ego /LE/ and (III) the aggressive persecutory ego, the so-called "Internal Saboteur" /IS/. The central ego and the two subsidiary egos together constitute the "ego-structure".
4. The objects are internalized and splitted up into: (I) the "exciting object" and (II) the "rejecting object". The internalized exciting and rejecting aspects of the objects constitute the "object-structures".
5. The defenses are employed by the CE against the objects and the subsidiary egos which are aligned with the objects.

The processes mentioned in features no. 3, 4, and 5 are described by Fairbairn sequentially in their dynamic relationship:

1. The splitting up of the internalized bad objects into exciting or rejecting objects (mentioned in feature no. 4).
2. The repression of both these objects by the CE. This form of repression is termed the "primary direct repression".
3. After the splitting up of the ego, the CE employs aggression by means of direct repression:
 - a) over the libidinal ego attached to an exciting object;
 - b) over the aggressive ego attached to a rejecting object.
 This is referred to as the "basic endopsychic situation"

4. "Indirect" repression is that which is employed by IS aligned with the rejecting object against LE which is aligned with the exciting object. This form of repression is referred to as the "secondary direct repression".
5. The good objects are also internalized. The good or the neutral objects are retained by the central ego as "ego-ideals".
6. Ego development is conceived in terms of object-relations. "Ego development is characterized by a process whereby an original state of infantile dependence based upon primary identification with the object is abandoned in favour of a state of adult mature-dependence based upon the differentiation of the object from the self" (Fairbairn 1966, p. 162).
7. The various psychopathological conditions are "specific techniques employed by the ego for regulating the relationship with internal objects for the purpose of defending the growing personality against the effects of the conflicts in early object relationship" (Fairbairn 1966, p. 155).
8. The drives impulses belong to the ego and the ego controls and regulates them according to the reality principle. "Ego is regarded as an original structure which itself is the source of impulse tension. (Hence, the distinction between the Id and the ego is abolished).^{1/} At the same time impulse tension in the ego must be regarded as inherently oriented towards outer reality, and thus initially determined by the reality principle, and it is only in so far as conditions of adaptation become too difficult for the child that the reality principle gives place to the pleasure principle as a secondary and deteriorative (as against regressive) principle of behaviour calculated to relieve tensions and provide compensatory satisfactions" (Fairbairn 1966, p. 157).
9. Ego identifies with the internalized object. The child's conditional goodness or badness may depend on the preponderant identification with good or bad objects.

1/ the comment in the bracket by the present author.

Implications of the Object-Relations Theory

We spelled out some of the implications arising out of the features of the object-relations theory summed up so far. Attention is drawn to them mainly because they concern the selection of certain personality variables for this investigation.

1. Object-relations occupy the central position in this theory of personality

The internal and the external object-relations assume primary importance. Aggression and libido i.e., the dynamic factors are directed towards the objects. (The libido is essentially object-seeking. Fairbairn, quoted earlier). The ego is directed towards a satisfactory relationship with the object. The defenses are directed against the objects. The ego-techniques are employed against the conflicts involved in object relationship. Referring to the major psychic experiences and emotions, Guntrip (an object-relations psychologist) states that "they are all object-relational experiences" (Guntrip 1969, p. 387). Such is the importance the theory assigns to the object-relations.

2. Ego development takes place in the object-relations

Fairbairn stated categorically that "any theory of ego development that is to be satisfactory, must be conceived in terms of relationship with objects which have been internalized during early life under the pressure of deprivation and frustration" (Fairbairn 1966, p. 162).

Ego development, as conceived by Fairbairn, progresses towards differentiation of the self from the object, and its mature dependence on the objects. In fact, Klein laid the foundations of the conception of the ego's existence and further development as based on the individual's object-relations. Klein led to the concept of the "primacy of good and bad object-relations as the meaningful experiences in which the ego either grows and matures or is stifled at birth or fragmented and lost" (Guntrip 1969, p. 418).

3. Environmental object-relations are the foundations of the internal object-relations, the ego defenses and the ego-techniques

Klein's work necessitated the conception of ego-development by environmental object-relations. According to Fairbairn the "objects are internalized during early life under the pressures of deprivation and frustration" (quoted earlier). This clearly states the role of environmental object-relations. According to Fairbairn's conception the disturbance is caused by environmental bad object-relations.

According to Winnicott, who emphasized infant-mother object-relations as most important, the disturbance is caused "by the not good-enough mother failing to support the vulnerable infant ego" (Guntrip 1969, p. 417). The "exciting" and "rejecting" aspects of the objects are supposed to be based on the environmental object-relations. Fairbairn referring to the parental objects internalized in childhood says: "it must correspond comparatively closely to the relative object in the outer reality" (Fairbairn 1966, p. 102). The ego's defenses and techniques are directed to "defend the personality against the effect of the conflicts involved in early object-relationships" (quoted earlier). Here, Fairbairn is referring to the conflicts arising out of the object-relations which existed in the outer reality. According to Fairbairn, the ego is expected to move in the direction of adaptation, but if "conditions" become too difficult, the ego adopts the "deteriorated behaviour".

The conditions, again, are environmental object-relations which can be depriving, frustrating, exciting, etc. Thus, environmental object-relations are the foundations of behaviour according to the object-relations theory of personality.

4. The past is linked with the present in the endopsychic structure of the individual

Early object-relationships shape and modify the internalized object structures. The ego structures dynamically relate to each other in defense against the internalized object structures and environmental object-relations. According to Fairbairn, "object-relationships exist within the personality, as well as between the personality and the external objects" (quoted earlier). The object-relations were conceived by Klein as the enduring structures of personality. Segal, discussing Klein's conception

of internalized object-relations, states: "developmental levels in the psyche do not pass away but endure as specific configurations of object-relations, anxieties and defenses which persist throughout life" (Segal 1964, p. XIII).

The specific configurations of object-relations, anxieties, and defenses formed in the past, continuously modify themselves and go through modifications induced by object-relations experiences of the present.

We may summarize the object-relations theory of the personality as follows: in human psyche, the past is linked with the present and the internal world with the external, through the object-relations and the dynamic ego-structures.

The Working-Model for Psychological-Evaluation

The present working-model for psychological-evaluation is primarily devised for the purpose of psychotherapeutic planning. In this evaluation, a dynamic formulation of the patient's problem is arrived at by linking the past developments with the present ones. The essential concepts are presented in brief without going into details of their implications.

The following structures are important in this working-model:

1. The Object-Relations
2. The Self-Organization

The Object-Relations

It refers to the basic object-relations of the individual with parents and significant others. The term "object" refers to the person en vivo, as well as to the inner representation of the person in the individual's mind. Thus, it refers both to the external as well as the internalized object. The disturbed object-relations in their overexciting and overfrustrating aspects are of concern in such an evaluation.

The Self-Organization

The "ego-structures" postulated in object-relations theory are highly abstract concepts, which are difficult to verify from the clinical information. Moreover, the "ego-structures" do not

specifically identify the status of the traumatic self-experiences, the disturbed self-image nor the identity. The ego-defenses and the ego-techniques insufficiently cover the defensive and the psychopathological patterns observed in the clinical situation. Instead, a broader concept of "self-organization" is used, which includes the self-experiences, the self-image and identity, and the status of ego-functioning. This in our view is found to be more satisfactory in psychological evaluation.

The term self-organization is used to encompass the following aspects belonging to the self of the individual:

1. Self-experience

The psychological emotional experiences of deep significance to the individual originating in the object-relations.

2. Self-image and identity

The content of self-image (i.e., the self-esteem) and the identity originating in the object-relations. Positive self-image and an independent self-identity are formed through the identity with the "good" and stable objects. The self-image thus depends on the cathexis of the ego and relationship of the objects with the individual. Hence, self-image and self-esteem are treated as one unit according to this model.

3. Status of ego-functioning

The ego functions to preserve the integrity of self and its relations with the objects. The status of ego-functioning requires analysis of the following:

a) Ego-strength

Ego-strength is derived from the healthy and gratifying individual object-relationships, provided the genetic and constitutional ego-endowment is unimpaired. The ego-strength is inferred from the perception of the reality for both the external and the internal environment. It is also inferred from the capacity to tolerate tension and anxiety. In other words, ego-strength is much more than merely the absence of a pathological degree of defenses. Ego-strength is the measure of coping and adaptation as well as an absence of pathological features.

b) defenses

The defenses are raised against anxiety and experienced by the ego against danger or an internal impulse.

c) psychopathological developments

Psychopathological developments take place due to the failure or excessive use of defenses. Formation of symptoms such as depression, neurotic anxiety, obsessive-compulsive phenomenon, etc., are included here.

The following postulates, which are largely derived from basic assumptions of the object-relations theory, concern the interaction between object-relations and self-organization (modifications and deviations are made in view of the requirements of evaluation for psychotherapeutic planning):

1. Events and situations in the life-space reality modify and influence the quality and pattern of the object-relations. The "situation" refers to the life-situations such as family, school, work, etc. The "events" refer to the events occurring in the life-situations e.g., death, separation, threat, danger, etc; Therefore, the analysis of early events and situations is important for the understanding of the early object-relations.
2. The quality of the experience derived from the object-relations determines, to a large extent, the individual's general experience of, and his response to the total environment. For example, if the experience derived from the object-relations was of warmth and security, it is likely that the environment would be generally perceived warm and secure, and the individual's response to it would be that of love and trust.
3. The self-image (self-esteem) and identity of the individual are formed by his libidinal cathexis of the objects and the object's response to his cathexis of them. Self-image and self-esteem are integral to each other, hence, put together. Summarizing the views of past authors on self-esteem, Coopersmith (1969) states: "We value ourselves as we are valued and this applies to extensions of ourselves as well as the more centrally experienced aspects of our self-images" (p. 37).
4. The self-experience of crucial importance stems from the objects' response and relationship with the individual.

5. The past self-experience and object-relations affect the present self-experience and relationships with the objects. That means that the pattern, perception, and the experience of earlier relationships will be "transferred" to later relationships. The relationship with the therapist is an example in which "transference" is widely discussed. "The patient sees in him the return, the reincarnation of some important figure out of his childhood (his parents) or past, and consequently transfers on to him feelings and reactions which undoubtedly applied to this prototype" (Freud 1940, p. 174).
6. The ego perceives and acts to preserve the integrity of self and its relations with the objects. This is referred to here as "ego-functioning". To appreciate the concept of ego-functioning one has to refer to the basic assumption that "libido is essentially object seeking". It is tantamount to the assumption that the existence of the ego basically depends on the preservation of the internalized objects. Three derivatives of this postulate are important here:
 - a) the threat/danger and the anxiety are conceptualized in the context of object-relations;
 - b) the defenses are conceptualized as a mechanism for preservation of self and the objects;^{1/}
 - c) the emotional conflict or the "psychological problem" is a product of ego-functioning.

The mechanism of ego-functioning is as follows: when confronted with impulse/danger, anxiety is aroused and defense is employed against it. It is shortly referred to as "an impulse/danger-anxiety-defense". A psychological problem results if this mechanism fails in leading to a successful resolution in the environment.

1/ Fairbairn considers obsessional, paranoid, hysterical and phobic conditions as the "ego-techniques for regulating the object relationships of the ego" (Fairbairn 1966, p. 31). The four techniques function as "defenses against the emergence of schizoid and depressive tendencies" (Fairbairn 1966, p. 163). The only Freudian defense discussed at some length as a basic defense mechanism is "repression" (see Fairbairn 1966, "The Repression and Return of Bad Objects", p. 59-81). In contrast to this we consider the analysis of classical defenses and of various psychopathological developments as fairly important to our model.

7. Failure or excessive use of defense (as mentioned above) leads to psychopathological developments (see footnote 1/) such as depression, anxiety, obsession, and other psychiatric symptoms and illnesses.

Perhaps an illustration may provide a concrete understanding of the model (see overleaf). Though it is an over-simplification of a complex human phenomenon, the diagram is nevertheless presented to illustrate how the events, situations, and the object-relations, in the individual's life-space, influence the self-experience and ego-functioning. The self-experience and object-relations of the past i.e., "in the life-history" of the individual (to borrow a term from the percept-genetic theory) may contribute to the present behaviour. The relationship between perception and personality may be now considered from the following angle: percept-genetic theory considers that the past and present are linked in various stages of the onto-genesis through the personality structure and the dynamic psychological developments. The latter are projected at the various stages of the percept-development. The object-relations theory considers the linking of the past and the present through the successive stages of the development of the ego and the object-relations. The primary, transitional, and the secondary object-relations are transferred and projected on present object-relations and consequently modify the ego-functioning. We may then ask: do the various stages of ego-object-relations appear in the percept-genesis of the stimulus, which consists of an object-relations theme?

As the DMT consists of a two-person object-relations theme, let us examine whether the DMT could elicit material concerning the object-relations and the self-organization.

Reasons for the selection of the DMT:

1. Claims are made by Kragh, the constructor of the test, that in the protracted serial analysis, there is a greater opportunity for analysing the stimulus-distal responses. "By using the test, one wants to "maximize" the reference of the data to the subject" (Kragh 1969, cited from Westerlundh 1976, p. 5).
2. Claims are made by Kragh and Smith that "some of the most

An illustration of how the loss of an object in the past may lead to a possible sequence of a particular kind of object-relations and self-organization, which may then affect the present object-relations and self-organization

Events and situations	Object-relations	Self-organization (self-experience and ego-functioning)
(<u>in the past</u>) Parental separation e.g., father deserted the family or father died, etc.	(leads to a drastic change in object-relations) <u>Mother</u>: clings to the child, and becomes dependent on him. She anxiously relates to the child, etc. <u>Child</u>: longs for and seeks the lost object. It also clings to the mother.	Child <u>experiences deprivation</u> and aggressive anxiety, caused by anger directed towards the lost object. Child's perception of object-relations: that father-object is "bad" and "rejecting". Mother-object is erotic and demanding (both objects become "bad" and anxiety provoking. Bad objects ought to be repressed). The <u>ego-functioning</u> may be described in this way:
(<u>in the present</u>) Therapy, which means to him, beginning of a new relationship, encounter with a new object, etc.	<u>Object</u>: seeking and approaching a new relationship. <u>Person</u>: clinging and over-dependent as a child and/or showing withdrawal and avoidance relationship.	<u>danger/impulse</u> - <u>anxiety</u> - <u>defense</u> loss of object anx. of self-an-nihilation aggressive, sexual impulse, etc. repression, isolation, etc. aggressive, sexual anxiety, etc.
		Object perceived as bad, rejecting, threatening, etc., signalling old anxieties (as mentioned above). The defense employed in such a situation is to repress and/or isolate the feelings.

frequently used clinical concepts, "feelings" and "emotions"... (and)...their intrinsic relation to stages of perception before the level of correct recognition, was already suggested by Schilder (1928), by Krueger (1924, 1928), and by Sander (1930, 1962). We assume that emotional quality, may be conceptualized, as one aspect of the (visualized) content of the marginal zone (P-phase content)" (Kragh & Smith 1970, p. 19).

The "feelings" and "emotions", in a way, constitute the "self-experience", which we referred to in our model.

3. DMT is constructed for the specific purpose of analysing the defenses. Perceptual "distortions" are analysed in accordance with psychoanalytic theory. A formalized coding and scoring system is available for evaluation of defenses. In psychotherapeutic evaluation, the defenses assume important consideration. We are in agreement with Kragh and Smith's statement that "great difficulties have, however, presented themselves to the more exact assessment of defenses. Projective techniques like the Rorschach, the TAT, etc., do not offer a focussed approach. (Smith & Kragh 1970, p. 179).
4. "The descriptions obtained in the early sections of the experimentally produced genesis appear to reflect more primary stages of relations with parents" (Kragh & Smith 1970, p. 50). Furthermore, Kragh's analysis of subjects with or without loss of the father (Kragh 1970, pp. 135-150; though he used father-son pictures without the threat), suggest that an event such as loss of father-object influences the percept-genesis of figural identifications. We reasoned that, if the projected theme of father-son elicits some experiences in relation to parent-object, it may be possible to find objective perceptual variables for the experienced relationship with object. It can be of great value because, at times, some experiences of object-relations are not available to the individual's conscious mind. We thought that, since in DMT the projected elderly figure is a "bad", threatening type (referring to our model), it would provoke the subjective experiences and defenses in relation to the objects when they appeared bad and threatening.

5. On the basis of earlier studies on the prediction of success for aviation cadets and attack divers, in which DMT criteria were used, it was found that DMT is suited for predicting the success of various types of personnel working under conditions of stress (Kragh 1970, pp. 180-189). If stress-tolerance implies ego-strength, then it is possible that certain DMT criteria may indicate the ego-strength of persons in a clinical situation. An individual's tolerance against frustration and anxiety, experienced in life and psychotherapeutic situations, assumes great importance in our evaluation.
6. The studies regarding clinical application of DMT, namely of animal-phobia (Kragh 1970, pp. 151-160) and dipsomania (Kragh 1970, pp. 160-168), with earlier versions of DMT, indicated parallels between the percept-genetic data and the life-experience data of the individual. Meta-Contrast Techniques (MCT), which is built on the same theory and related technique, has shown results with high validity for psychiatric illnesses and defense mechanisms (Smith & Nyman 1970 and Nyman & Smith 1970).
7. It was speculated (personal discussions with DMT experts) that the percept-genesis of the figures expresses certain aspects of self-image and identity. Only recently, Hessle has published his findings on the basis of which he conceptualizes that on DMT "during the brief exposures, the less developed ego-organization is activated, during longer exposures, a more developed ego-organization is activated...all the self-experiences to which one has access in the form of phases in the percept-genesis constitute that, which could be called an aspect of self-identity" (Hessle 1975, pp. 187-188).

Summarizing, it would appear that attempts in DMT analysis are in the direction of studying the personality variables such as the defenses, experiences, parental loss, stress-tolerance, psychiatric illnesses, etc. We consider that the percept-genetic technique employed in reference to the threat stimulus ("Oedipal situation provoking infantile anxiety, quoted earlier) has a promising potential for the assessment of the self-organization and the object-relations which according to our theoretical

orientation were formed "during early life under the pressures of deprivation and frustration". However, identifying and ascertaining the relationships between the DMT responses and the individual's object-relations and self-organization present considerable difficulties. The definite evidence required for objective measure is still lacking. In some cases, the ways for formal analysis of certain personality aspects are not yet evolved.

Problems in Identifying Objective DMT Variables

1. Though DMT has a formalized scoring system for assessment of defenses and the analysis is in accordance with psychoanalytic theory, the validity evidence obtained so far could only be called as preliminary. Westerlundh (1976) sums up the present position: "the validity question is, however, important and certainly not completely solved" (p. 6).
2. The assumption that there is a correspondence between the percept-genetic phases and the life-history has been studied qualitatively in just a few individual cases.
3. Phenomena of object-relationships studied by the DMT require validation against the external source. Kragh's study of the percept-genesis in the case of loss of father-object is validated against the external source but the other studies of object-relationships have aimed at the construct validity. Kragh and Kroon (1970) studied the percept-genesis of the pictures with an aggressive motif in the case of young offenders. Kragh and Kroon related it to the aggressive need presumably against the parental figures and to the pathogenic defenses against this need. Kragh and Johnson (1970) studied the percept-genesis of the "father"- "son" figures in the religious personality. They observed that students of theology were more defensive than the control group. The father relationship investigated at the percept-genetic level appeared to be less satisfactory in students of theology. In the above studies, though the percept-genesis is meaningfully related to the psychoanalytic theory, the correspondence of the various percept-genetic features with the dynamic

developments in actual life identified by therapists or psychoanalysts, is yet to be evaluated.

4. Stress-tolerance which implies ego-strength for a particular demand, has been studied for a "normal" group of aviation cadets and attack divers. DMT variables for ego-strength in psychiatric cases yet need to be identified.
5. Phenomena, such as self-image and identity, have just begun to be studied. At the time of investigation, no definite DMT variables were identified for the content of self-image and identity.
6. Several versions of stimulus-pictures were used for different studies. If the psychological evaluation consists of the final version of DMT pictures, the generalization of results from other studies for identifying objective variables is questionable.

Kragh and Smith's statement (1970) best sums up the present position in these words: "a thorough comparison between PGs (percept-genetic experiments)¹ on the one hand, and findings obtained with subjects undergoing psychodynamically oriented psychotherapy on the other, will be needed" (p. 105).

Statement of the Problem for the Present Investigation

The working model of psychological evaluation and the theory of object-relations point out the need for evaluation of the dynamic structure of the personality. The internalized object-relations, the self-organization based on early experiences, and the environmental object-relations are highly complex and often inaccessible to the conscious experience. The need for an objective analysis of these structures cannot be overemphasized. The DMT, a percept-genetic technique consisting of an object-relations theme of early anxiety, elicits the individual's experiences/perceptual responses to this theme at various levels of awareness. The DMT appears to have a potential for the evaluation of the variables in question and previous studies with the test have shown a basis for such a potential.

1/ the text in the bracket is written by the investigator.

The DMT variables for an objective assessment of self-organization and object-relations need to be validated. As the interest in a clinical setting is focussed on the disturbed states of self-organization and object-relations, we asked: "could the DMT variables indicate the presence and the status of the disturbed self-organization and object-relations?" Further, "could the perceptual additions, eliminations, distortions, and other disturbances in the process of correct perception of the central figure (presumably the representation of the self) and the peripheral figure (presumably the representation of the object) indicate the disturbances in self-image, self-experience, ego-functioning (i.e., the aspects of self-organization) and the environmental object-relations (i.e., the aspects of object-relations)?"

The problem undertaken for the present investigation is the evaluation of the validity of the DMT variables, just mentioned, for the assessment of disturbance in self-organization and environmental object-relations. The clinical data on disturbed self-organization and the disturbed environmental object-relations is the criteria against which the DMT variables, consisting of the "perceptual achievement", "defense signs" and the "content analysis measures", are validated.

Statement of the Method

Nineteen therapists engaged in psychodynamic psychotherapy participated. Twenty seven patients receiving individual psychotherapy with the above therapists, formed the sample. The clinical data on the patients is obtained from the therapists and the patients. The DMT data is obtained by administration of DMT on the same patients. Due to our specific interests, some variables were to be modified and new ones to be added. Along with the existing variables, the new and/or modified, which seemed important judged from a preliminary exploration, along with those of my personal patients, were included for validation. The evaluation of the validity for the DMT variables was attempted in two studies. Both studies were carried out independently and simultaneously.

Study 1

It is primarily based on a qualitative analysis of the clinical data obtained on 27 patients through extensive interviews with their therapists. Positive relationships between the DMT variables and the personality variables were predicted for following:

Personality VariablesDMT Variables^{1/}(Object-Relations)Disturbed environmental object-relations

- | | |
|---|------------------------|
| - Excessive preoccupation with parents | Figural identification |
| - Prolonged relationship with the
opposite-sex parent | " " |
| - Undifferentiated self with the object | " " |
| - Lack of object constancy | " " |
| - Disturbed and negative relationship
with the same-sex parent | " " |
| - Disastrous event with the parent object | S-dystonic percept |

(Self-Organization)Traumatic self-experience

- | | |
|---|---------------|
| - Early experience of physical anxiety | H in danger |
| - Physical anxiety and aggressive
response | H-threatening |

Disturbed self-image

- | | |
|---------------------------|---|
| - Narcissistic self-image | Positive feeling
expressed towards H |
| - Negative self-image | Negative feeling
expressed towards H |
| - Labile self-image | Size-change percepts |

Status of ego-functioning

- | | |
|---------------------------|------------------------|
| - Ego-weakness | Figural identification |
| - Characteristic defenses | Defense signs |
| - Depressive condition | Darkness percepts |
| - Obsessive condition | Detailistic percepts |

The analysis of the relationship between two sets of variables is carried out with the Fisher 2X2 tables to observe if the

1/ for elaboration of the DMT variables refer to the "Analysis Scheme for the DMT Measures".

groups formed on the basis of the presence and the absence of the DMT variables differed significantly with regard to the personality variable. Exact probabilities of the relationship are computed. The predictive validity is evaluated by computing the Goodman and Kruskal "index of predictive association" between the DMT and the personality variables.

Thus, study 1 was the attempt to evaluate the predictive validity of the DMT variables. Note that the type of validity is mentioned merely to convey the emphasis in evaluating the validity. This does not mean that other types of validity may not be available from a particular analysis. Bellak (1961) states that "the different forms of validity overlap considerably and are to a certain extent arbitrary and artificial separations" (p. 97).^{1/}

Study 2

It is primarily based on the objective assessment of data obtained from the patients and the therapists, and consists of a Q-factor analysis with an exclusive input of the DMT responses of the same sample of the patients mentioned in study 1.

Responses of the patients were coded for 78 DMT variables consisting of "perceptual achievement", "defense signs", and the "content analysis measures". The objective data, namely the patient's self-ratings of his adaptive and defensive behaviour and the therapist's rating of the patient's adaptive abilities and defense mechanisms had been obtained earlier. Ad-hoc analysis of the objective ratings and scores was to be carried out in view of the Q-factors formation and consequent identification of the significant discriminatory DMT variables. The discriminative power of the DMT variables was analysed by D(W) index method (Risberg 1972). Two more assessment measures were introduced for ad-hoc analysis, viz. the transference behaviour checklist and the improvement criteria checklist.

The purpose of this exploratory investigation is to examine

1/ for discussion on different types of validity refer: American Psychological Association (1954), Technical Recommendations for Psychological Tests and Diagnostic Techniques - Psychological Bulletin, supplement 51.

if the factors are clinically meaningful. In view of these significant discriminatory variables, hypotheses consistent with the object-relations and the psychoanalytic theory are formulated. It is predicted that the representatives of a factor will differ significantly with those of another with regard to personality variables. If meaningful differences are observed during inter-factor comparison, it will, on the one hand demonstrate differential validity of the DMT variables for certain personality variables and, on the other, it will confirm that a meaningful relationship, in line with theoretical interpretations, exists between the factors and the personality variables.

The direction of testing the DMT variables for validation is pointed out by the theoretical concepts. In the next chapter, the integration of the working model, the object-relations theory of the personality, and the percept-genetic theory of the DMT is attempted which points out the general direction of the hypothesized relationships. The specific assumptions for both the studies are inferred from the subtle, and at times highly complex psychodynamic concepts, but the attempt in evaluating the validity has been to confine the analysis to observable facts. To a large extent, the formal objectively scorable signs of DMT variables are compared with the criteria of the personality variables. Where it was possible, the factual accounts of events, situations, and the overt manifestation of inner psychological processes, were preferred to endopsychic structures to be considered validity criteria. In the process, I run the risk of being accused of "concretism" but the risk appeared worth taking in view of the many concepts and assumptions whose inter-relationships we know very little, which were being tested for the first time.

Projection of the Object-Relations and the Self-Organization
on the DMT

(Some general assumptions derived from the object-relations theory, the working model for psychological evaluation and the DMT)

Though specific assumptions will be outlined for each hypothesis, general assumptions need to be stated to explain the basis of the selection of certain personality variables and DMT variables, which were to be validated against the former. The general assumptions also lead towards an integration of the many concepts of the percept-genetic theory, the object-relations theory, and the working model.

A DMT stimulus consists of two persons. As stated earlier, the central figure is of a younger person and the peripheral figure is of an older person. At the psychic level, it can be assumed as a two-person object-relations situation, namely of the ego (self) and the parent object. Ideally, H is the representation of the self and S is the representation of the object. The older person S is shown in an aggressive, threatening posture. Due to the stimulus reality, the parent object is more likely to be perceived as the "rejecting object" i.e., the bad, threatening object. However, at the unconscious level, both the "exciting" and the "rejecting" aspects of the object may be activated. Ontogenetically, both the "rejecting" and the "exciting" aspects of the object are internalized by the ego. Besides the appearance of the rejecting and the exciting objects, the "good" objects may be perceived by a compensatory mechanisms. Ontogenetically, the "good" objects are internalized "to allay the anxiety arising out of the presence of bad or unsatisfying objects in the inner world" (Fairbairn 1966, p. 178).

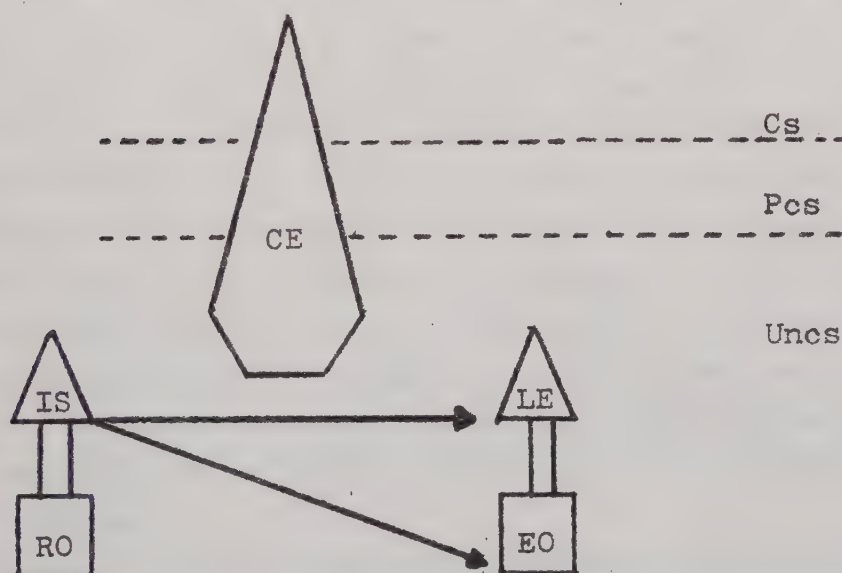
It may be asked: how are the experiences organized in the ontogenesis and why do they manifest themselves in the percept-genesis? Object-relations theory assumes that the major psychic experiences and the emotions are object-relational. Object-relations in the outer reality are internalized by the ego. The internalized object-relations along with the ego structures constitute the endopsychic structure of the individual (refer to

the features of the object-relations theory).

We assume that since the ego is functioning through the perceiving apparatus, the dynamics of the endopsychic structures is shaping the percept more so at the stimulus-distal exposures of the figures. This is in line with Fairbairn's interpretation of a dream in which the dreamer is attacked by another person. The attacking person symbolizes both the "attacking parent" and the "attacking ego". The "attacking parent" is both the exciting and the rejecting object.

The above represents an endopsychic situation very similar to the one expected in the DMT situation in which the parent figure may have been perceived as attacking the individual's ego.

The endopsychic situation identified by Fairbairn (1966, p. 105) in the context of the dream, is as follows:



CE - Central Ego
 IS - Internal Saboteur
 LE - Libidinal Ego
 RO - Rejecting Object
 EO - Exciting Object
 Cs - Conscious
 Pcs - Preconscious
 Uncs - Unconscious

The endopsychic situation represents the activation of the internalized aspects of the objects from the unconscious.

CE represses the IS and the LE. Thus, what is perceived in the preconscious and the unconscious, is the product of endopsychic activity.

We feel that the stimulus-distal exposures in the DMT will activate a similar kind of endopsychic activity. In fact, Kragh and Smith (1970)^{1/} have concretely illustrated the development of perception, viz. the conscious, the preconscious, and the unconscious. The "meaning" of a percept is carried from the previous stages and transformed in successive stages until the correct recognition is reached at the conscious level. The "primary meanings", the "secondary meanings", and the "tertiary meanings", given by a subject to a percept, are dependent on the personality structure, the early experiences, and the psychological developments in the life-situation. It could be extrapolated, that the central ego perceives and interprets the stimulus through a dynamic interaction with the subsidiary egos. The subsidiary egos from the unconscious relatively influence the percepts at different stages of the development of the percept. Their relative influence and interaction would depend on the forces of the dynamic factors i.e., the libidinal and aggressive cathexis of the subjects, the subsidiary egos aligned to them, and on the effectiveness of the repressive mechanisms employed by the central ego.

The projection of the onto-genetic sequence of two-person object-relations on DMT pictures may be, ideally, expected to be as follows:

- a) the infantile stage of dependence may be perceived. The defensive activity may operate at any stage from now, onward.
- b) the bad object will be split into "exciting" and "rejecting" objects. The object may be perceived as comforting, pleasant, erotic, etc., or bad, horrible, rejecting, etc. The internalized "good" object may also appear. Experiences, feelings, and conflicts experienced in object-relations may be activated

1/ refer to the diagrams of "transformations of meaning during the development of a percept" and "transformations of organization, meanings and structure during the development of perception-personality: a concrete example" (Kragh & Smith 1970, pp. 26-27).

and they may impinge on perception of the figures. The stimulus-adequate identification of H will depend on the degree to which the ego differentiates itself from the objects and on the ego's attainment of an identity of its own.

- c) Prolonged stimulus exposure will intensify the "rejecting" aspect of the object; symbolically representing the "return of the repressed object".^{1/} Further, defenses may be employed to deal with the effects of conflicts aroused in early object-relations. The stimulus-adequate identification of S will depend on the degree to which the ego differentiates itself from the objects and the objects from one another. By object-differentiation we mean the realistic perception of objects for "what they are", as opposed to the distorted perception of external objects, which is based on internalized early object-relations.

According to the object-relations theory, the defenses employed by the ego are the direct and indirect forms of repression. In a departure from the object-relations theory, we stated in the working model that various defenses highly differentiated from each other are in command of the ego. The defensive activity, as we have conceptualized, consists of the major psychoanalytic defenses. In agreement with the object-relations theory, we assume that the defenses are employed for the purpose of defending oneself against anxiety caused by the "bad"-object.

1/ for discussion on the defenses employed against the return of the repressed bad object refer to Fairbairn (1966, pp. 59-81).

S U B J E C T S

Procedure

The DMT variables were to be validated against the individual's object-relations and self-organization. In order to possess satisfactory information, a clinician requires an extended contact and a reasonable degree of familiarity with the patient.

It was assumed that individual psychodynamic psychotherapy provides a clinical situation in which the therapist is likely to have received extensive information on the individual's life-experience such as his historical development, his family background pattern of object-relations, etc. Simultaneously, he is expected to have had an opportunity for making personal observations, with regard to the individual's present functioning, through the ongoing interaction with the patient.

We decided to form a sample of patients who have been receiving psychotherapy for at least a period of 6 months prior to the administration of the DMT. Therapists were selected from the following groups:

1. Members or associate members of the British Psycho-Analytic Society, which in this case included the Klienians, the Middle Group, the Anna Freudians, and (Freudian) analysts.
2. Jungian analysts.
3. Adult psychotherapists who had earlier completed or were going through training in adult psychotherapy, which too, like the above two specializations, requires personal analysis.

Contact with the Therapist and the Selection Criteria for the Patient

First contact was made through a letter, the text of which was as follows:

"I ask you to participate in an investigation I am conducting on the relationship between perception and personality. More specifically, I am studying how a patient's personality and psychopathology influence his perception. The test consists of showing some TAT-like slides and obtaining perceptual responses to them. Since it is an investigation of some depth

I ask you to offer me a patient whom you are quite familiar with

and with whom you are currently engaged in individual psychodynamic psychotherapy. By psychodynamic psychotherapy, I simply mean the one in which a therapist believes that a patient's symptoms and problems are the result of interaction between biological, social and psychological forces, and that an increase in the patient's insight and awareness would lead to a healthier adjustment.

1. Criteria

I request you to select a patient who meets the following criteria:

- a) he should be receiving individual psychodynamic psychotherapy;
- b) he should have engaged in psychotherapy with you for at least 6 months with a minimum frequency of once a week;
- c) he should be between the age of 20 to 55 years;
- d) he should have normal sight with or without glasses;
- e) he should not be currently going through a psychotic phase i.e., should not be presently suffering from hallucinations or delusions of any kind. (This of course does not preclude a patient who may have had a psychotic illness in the past).

2. Communication to the patient

In order to control the extraneous influences over the investigation, we suggest that you make only the following communication to the patient who you select for the investigation: "a colleague of mine is doing a research on how perception is related to the personality. The procedure is that he will show you pictures in a viewer and ask what you see. Do you think you would like to participate?"

As you well understand, any further communication may unduly influence the results. In my experience, this explanation usually satisfies the patient.

I look forward to hearing from you, and I thank you in advance for your cooperation".

A second contact with the therapist was made after a week or so as a follow-up of the letter. Further arrangements were discussed with those therapists who were willing to participate. A few patients had to be dropped out of the final sample on account of their unwillingness to participate.

Demographic Characteristics

Age-sex marriage

The sample consists of 27 psychiatric patients who had been receiving individual psychodynamic psychotherapy at the out-patient level. The patients were receiving psychotherapy from the same therapist, for at least a period of 6 months prior to the administration of the DMT. There were 13 male and 14 female patients in the age-range of 23 to 51 years. Two thirds of the sample belonged to the 23 to 35 years age-group. The breakdown of the sample for sex marriage, and age is given in table 1.

Table 1

Distribution of Sample According to Age,
Sex and Marrital Status

	Male (total 13)		Female (total 14)	
	below 35	over 35	below 35	over 35
Married (total 10)	3	2	3	2
Unmarried (total 17)	4	4	8	1

Education and social class status

The breakdown of the sample in terms of education and social class status is given in table 2.

Table 2

Sex-Distribution for Education and Social Class

	Number in the sample (1)	Male (2)	Female (3)
<u>Education</u>			
University degree	11	5	6
"A" levels (equivalent to pre-university)	8	6	2
"O" levels (equivalent to Xth grade)	8	2	6

Table 2 - Continued

	(1)	(2)	(3)
<u>Social class</u> ^{1/}			
Middle Class III	24	12	12
House wives	2	0	2
Skilled labour class IV	1	1	0

Referral problems

The breakdown of the sample as per the "referral problem, as stated by the patient at the time of the referral, for which he was seeking treatment from the therapist, is shown in table 3.

Table 3
Classification of Problems at Time
of Referral for Psychotherapy

	Male	Female	Total
Difficulties in inter-personal relationships	8	7	15
Depression	6	7	13
Anxiety and panicky feelings	6	6	12
"High" and "low" moods	3	6	9
Persistent thoughts and compulsive behaviour	5	4	9
Somatic complaints	2	5	7
Sexual complaints	3	2	5

Difficulties in interpersonal relationships refers to problems in maintaining or forming relationships with people e.g., with friends, colleagues, parents, authorities, etc.

"High" and "low" moods refer to the cyclical mood changes of

1/ Status based on Her Majesty's General Register Office Classification of Occupations 1966 U.K. Five patients in the sample were "economically inactive" i.e., they were not employed at the time of the classification but their status was determined on the basis of previous employment.

depression and elation.

Somatic complaints refer to psychosomatic complaints such as fatigue, headache, body pains, weakness, giddiness, etc.

Sexual complaints refer to the problems in sexual functioning e.g., impotence, frigidity, difficulty in proper erection, etc.

Patients complained of more than one problem, hence, the total number of problems exceeds the number of patients.

Duration of psychotherapy

The patients had received psychotherapy from their present therapists for different lengths of time. The therapeutic contact ranged from 6 months to 7 years. The breakdown of the sample for the period of psychotherapy is given in table 4.

Table 4

Duration of Psychotherapeutic Contact
at the Time of the DMT Administration

Duration	Number of patients
6 months to 1 year	10
1 1/2 to 2 1/2 years	7
3 and above years	10

All patients were seen at least once a week for the periods mentioned above. Sessions varied from one to five times a week, which also influenced the intensity of the psychotherapeutic contact.

Therapists' specialization

Nineteen therapists who were practising individual psychodynamic psychotherapy participated. They were classified in terms of their psychotherapeutic specialization, as given in table 5.

Table 5

Therapists and Their Psychotherapeutic Specialization

Psychotherapeutic specialization	Number of therapists
A. Members or associate members of British Psycho-Analytic Society (total 11)	
- Middle Group	5
- Klienians	3
- Anna Freudians	1
- Analysts	2
B. Jungian Analysts	2
C. Adult Psychotherapists	6
Total	19

Objective diagnostic assessment of the patients

The diagnoses provided by the therapists followed a uniform system. Some were based on psychiatric disease classification system, while others followed the psychoanalytic classification. A few therapists withheld diagnosis.

In order to have a uniform system of diagnostic classification, we approached two psychiatrists to act as independent judges. Referral problems and clinical descriptions of illnesses were made available. The raters were only to follow "The British Modification of International Disease Classification" (BMIDC) system. The judges were instructed to arrive at single diagnostic categories as close as possible. Doubtful cases were to be resolved by mutual agreement. In 20 cases, the judges had independently arrived at the same diagnoses. The diagnoses, assessed by the independent raters, are given in table 6.

1/ The investigator has not come across any formal definition of the "Middle Group". However, it would be a fair description of the group, as the one, which is associated with the theories of Fairbairn and Winnicott.

Table 6
Assessment of Patients, Diagnoses as per the BMDC System

Diagnoses	Male	Female	Total
A. Personality Disorder (7 patients)			
- Cyclothymic	1	2	3
- Schizoid	0	2	2
- Anankastic	1	1	2
B. Neurosis (11 patients)			
- Neurotic depression	3	2	5
- Anxiety neurosis	3	1	4
- Obsessive compulsive	2	0	2
C. Psychosis (1 patient)			
- Manic-depressive	0	1	1
D. Combined Diagnostic Categories (8 patients)			
- Cyclothymic (depressed type) + Anankastic	0	3	3
- Schizoid + Depression	2	1	3
- Anxiety + Depression	1	1	2

The judges did not find it possible to clinch a diagnosis in the case of 8 patients. But they then arrived at combined diagnostic categories which supposedly identified the patients' illnesses more appropriately.

Characteristics of the sample

1. The final composition of the sample was dependent on the therapist's discretion and the patient's consent. This contributed to the "filtering" process at several levels.
2. Since they were receiving psychotherapy at the outpatient level, it can be expected that these patients are relatively self reliant with respect to meeting demands of the life situation, compared with patients who are hospitalized.
3. The process of psychodynamic therapy reactivates past experiences. The reactivation of past experiences may contribute to their projection onto the pictures.
4. The relative length of psychotherapy, the stage of reconstitution and restructuring of the personality, the degree of

conflict resolution, etc., are likely to modify the self-organization and the object-relations to varying degrees. It is expected that the above mentioned variables would contribute to the heterogeneity of the sample.

5. The patient's perception of the DMT investigation as an event in therapy, communication with the therapist, and as a means to derive personal therapeutic benefit, were a result of involving both the therapist and the patient in the investigation. The variables mentioned above would characterize the "set" of this group for taking the test.
6. However, being a group of patients seeking professional therapeutic help, it can be safely assumed that they find it difficult to cope on their own. A fair amount of disturbance in ego-functioning is likely to be present. Disturbances in ego-functions to which psychotherapeutic techniques are directed have been listed by Bellak (1964, pp. 219-233):
 - a) disturbance in adaptation to reality,
 - b) disturbance in regulation to drive,
 - c) disturbance in object-relations,
 - d) disturbance of thought processes,
 - e) disturbance due to repression and other defenses,
 - f) disturbance of autonomous functions, etc.

DATA COLLECTION

1. The Defense Mechanism Technique with the Analysis Scheme for the DMT Measures
2. Adaptive-Nonadaptive Behaviour Rating Scale (ANB Self-Rating Scale)
3. Interviews with the Therapists with the Interview Schema
4. Ratings by the Therapists
 - a) Adaptive Abilities Rating Scale (A.A. Rating Scale)
 - b) Defense Mechanisms Rating Scale (D.M. Rating Scale)

THE DEFENSE MECHANISM TEST (DMT)

Procedure

A minor modification was made in the instructions on the basis of our preliminary work. It concerned the request for a drawing, and was as follows:

"This is not a test of your drawing ability. Simply do a matchstick drawing, or say a sketch in free hand of what you see each time".

The rationale for this modification in the instructions was due to our observation that people evinced hesitation to "draw". A quick response to this request was: "oh, I am very bad in drawing" or "I am afraid I can't draw at all". It was felt that, to these subjects, drawing meant a skilful activity. It was felt that putting it as "simply a matchstick drawing or a sketch" would deemphasize the skilful aspect of drawing and put the subject in an informal mood.

Definition of Structure and of Stimuli

Definition of structure and of stimuli is the same as "The DMT Scoring Scheme".

Localizations of Structures

Localizations of structures are the same as "The DMT Scoring Scheme".

Pictures

The pictures used in the investigation were the final version of the DMT slides.

General Scoring Rules

General scoring rules were as per the DMT Scoring Scheme.

The specific modifications and the total analysis scheme for the DMT measures used in the investigation are presented in the "Analysis Scheme for the DMT Measures".

Analysis Scheme for the DMT Measures

I. Need for modifications

The study was conducted in London on patients receiving psychotherapy in clinics and institutions situated in the city. This presented several difficulties such as:

1. The test was to be administrated on the British population and thus some cultural differences were expected. (At the time of the investigation, no study on the cross-cultural aspects were available).
2. To study the group of psychiatric patients some adjustment to suit the clinical group were likely to be indicated, for some differences between the clinical-normal population were expected.
3. To examine the DMT measures for clinical psychological evaluation of the psychiatric patients, it seemed imperative to modify and construct new measures, particularly for perceptual achievement and content analysis.

We set out to do a preliminary informal exploration on friends expected to be "normal", and a few personal patients who were in long-term psychotherapy with the investigator. Since the investigator had a reasonable amount of information on these patients, it appeared particularly valuable for these two measures, namely for the perceptual achievement and content analysis.

For preliminary exploration, we reached the following conclusions:

1. Instructions about drawing need to be a bit more informalized to put the patient at ease.
2. For perceptual achievement measures, more gradations or intermediary "scale-points" are required to sharpen the differences in the perceptual achievement of individuals. For example, while S-identification could be one measure of perceptual achievement, some scale-points could be added in the direction of S-identification, such as the first scale-point could be applied when an unspecified object or person is perceived in the stimulus area of S. The next scale-point could be when a person is perceived in the stimulus area of S, while age and sex are still to be identified.

The rationale for introducing the intermediary scale-point is justified by the fact that identification of figures is reached through successive stages, and what is needed is a marking of these milestones. Another advantage of this analysis is that it yields positive scores on which group comparisons can be made.

3. We decided that judgement on the quantitative values should be taken on the basis of the frequencies of our exploratory group. For example, some defense signs such as isolation and reaction-formation appeared in abundance, while the signs such as denial and identification with aggressor appeared less frequently. If we were to take some "higher" values for analysis, we would do so on the basis of the preliminary averages of our exploratory group. Therefore, while we take four signs of isolation as an indication of "high" isolation, only one sign is considered "high" for denial.
4. The cut-off point in the series was to be determined empirically. By cut-off point, we mean that part of the series which should be considered higher for stimulus-reality value. One possibility was to consider the 14th exposure (last phase) as the cut-off point. However, we observed that some responses of considerable interest from the psychopathological and identification point-of-view had appeared slightly earlier, and that these were less frequent in the last exposures, viz. the 18th, 19th and 20th. A plausible explanation for this could be that very early exposures, such as before the 5th, may be too condensed for identification of such feelings and experiences, while the last exposures may be so heavily loaded with stimulus-reality pressure that the projection of such feelings becomes extremely difficult. We decided to mark

the 10th exposure as the cut-off point. The series before the 10th exposure is considered the series with "less stimulus-reality loading", while the series after the 10th exposure is considered the series with "greater stimulus-reality loading". For analysis of identification of figures, generally, double value is assigned to the atypical identification, if they occur after the 10th exposure. However, for the defense signs, the 14th exposure is accepted as the critical point in the series. Therefore, the late-phase occurrence of a defense sign has the same value as assigned in Kragh's analysis.

5. It appeared that the difficulty value and/or content value of some items can be increased in order to make them more discriminative of the clinical population. For example, it was decided to accept only that phase as Pi in which a person is perceived. The perception of an object would not be accepted as Pi according to this criterion (discussed more fully in the Perceptual Achievement Measure). The modifications and the introduction of new variables are presented under the headings for the respective measures.

II. Perceptual Achievement Measures

Ego-psychology has conceptualized perception as an ego apparatus. Perception according to this concept is a major ego apparatus. A very important function of the ego is to be in touch with the reality of the environment, to perceive incoming danger, and then prepare, plan and defend accordingly. To draw an analogy, ego is the "eye" of the psycho-analytic personality structure.

While defining the ego functioning, the first function listed by Bellak (1961) is the one in which "the ego organizes and controls motility and perception" and the third function is listed as the one in which "the ego tests reality and engages in trial-action (Freud's formulation of thinking) and sends out danger signals (anxiety)" (pp. 99-100). Hartmann speaks of autonomous factors in ego development which are "apparently referring to motor, perceptual, intellectual, and maturational equipment" (Bellak 1961, p. 100). Ego-strength is defined partly by the degree to which the ego performs its function of reality testing, and ego weakness conversely by the degree of perceptual disturbance. "The reality testing function can be seen as a structural capacity of the ego...the ego comprises those apperceptions...which permit one to differentiate (by experience) various figures and ground judgements e.g., external versus internal" (Bellak 1956, p. 24).

It is argued, that a greater tendency for stimulus-adequate perception will indicate a higher level of ego-strength. DMT is a percept-genetic technique which registers perception at different levels of exposure. It is possible to assess if and when some milestones such as P-phase, T-phase, and C-phase are achieved. At the same time, some milestones

could be added to enhance the potential of the test in this direction (to be discussed later).

Ego-strength in clinical-evaluation demands attention for another important question, and that is: how far the ego apparatuses are vulnerable to, or autonomous of the anxiety and the defenses? (refer Hartmann 1950, pp. 74-96).

It is true that all defenses primarily originate in the service of the ego and it is for this reason that Murphy lists coping, in addition to defenses, as ego-mechanisms. But it so happens that the defenses, if intensified beyond a certain degree, could undermine, weaken or destroy the reality functioning of the ego apparatuses. Ego apparatuses, such as memory, intellect, perception are considered to be affected by the anxiety and the defenses. It is being reasoned here, that a measure of perceptual achievement in face of projected danger (to the hero and thereby resulting in anxiety experienced by the ego), will indicate the level of ego's autonomy. By ego's autonomy we mean the autonomy of the perceptual apparatus to work towards reality in spite of the anxiety and the consequent interference by the defenses. As the concept of "autonomy" and "vulnerability" is a relative one, it is postulated that a more stimulus-adequate perception will indicate that for purpose of reality-functioning the ego is more autonomous than vulnerable to the anxiety.

Thirdly, the ego-strength demanded for therapeutic benefit pertains to the faculties of perception, namely, the internal and the interpersonal perception. Capacity to observe and watch oneself, recognition of feelings, insight, reality-sense, so important in order to benefit from psychotherapeutic process require an objective, reality-oriented perception. However, this raises more questions than answer them. For example, is external perception similar to internal perception? Could a good perceptual achievement in a process such as DMT, indicate good capacity for emotional insight? Does figural-perception have bearing on interpersonal perception in close relationship situations and social relationships? However, if the achievement of certain perceptual milestones on DMT have a positive relationship with perception of internal reality and external reality in individual's life-situation, then DMT variables could be a measure of ego-strength.

It may be argued that the perceptual achievement variables such as the Pi, Ti, and Ci refer to the perceptual threshold and therefore are psychological variables which do not indicate the psychological aspects. This argument does not appear convincing in view of the concepts of ego psychology which consider the constitutional and physiological endowment as a major contributory factor in ego-growth. Bellak (1961) considers that the ego will be strong if the "congenital, genetic or constitutional equipment is good" (p.100). According to him Hartmann's concept of the autonomous function of the ego provides "a conceptual basis for the assumption that some inherent non-specified organismic qualities, possibly genetically transmittable, may also influence "good" organization of apperceptions (and thus in

in our terms, a strong ego)", (Bellak 1956, p. 24).

In order to identify the degree of perceptual achievement, new "milestones" of perceptual achievement had to be introduced. In some cases, the criteria for existing variables were modified to increase the difficulty value so that the variables could serve the purpose of greater discrimination amongst the patients. After the determination of the criteria and the introduction of new variables, the following questions were asked on which comparisons could be made: (a) was a particular milestone achieved or not? (b) if yes, when (i.e., at what exposure) was it achieved?

Let us first take the existing variables for which the criteria were modified:

P-phase (Pi)

According to Kragh's scheme, Pi is the phase when the subject sees a living or represented being or an object for the first time in the stimulus area of the central figure and/or threat figure. This being, object must be outlined and specified and may not be a so called secondary interpretation of the type e.g., "it looked like" or "seemed to be".

Modification

This phase is accepted as Pi only when the subject sees a person or represented person in the stimulus area of the central figure. The person or the represented person should be outlined and it would be accepted as Pi even if he says "it looked like" or "it seemed to be".

The rationale for the first modification is a conceptual one arising from our interest in the "reality-sense" of the patient. It was reasoned that if the "reality-sense" and "reality-contact" is a function of perceptual ego-apparatus, then perception of a person would prove to be a more discriminative variable for ego-strength. Moreover, this would also reflect on the person-orientation of a person, often equated with feeling and sensitivity. To illustrate, a patient having seen a "monkey" or a "crab" is not accepted as Pi, while responses such as boy, girl or Buddha are.

Rationale for the second modification was prompted solely by our experience with British Subjects. Most of them continued using the expressions "it looks like", "it appears", "it looks as somebody", etc. It appeared more of a sticky, British tendency to continually use such expressions, until one was quite certain. Hence, it was decided that as far as a subject reports seeing a person, it would be accepted for Pi, even though he uses an expression of uncertainty.

T-phase

No modifications were made. However, it must be pointed out that the responses accepted for T-phase, ranged from a perception of "as if he is going to attack him"; "creeping behind him with a sinister motive" to responses such as "scowling at her with a distorted mouth"; "angry at him"; "overcritical of him" or "disapproving".

C-phase

The only modification was made by adding one more condition for correct recognition of S, which was that age and sex of S also needed to be correctly identified. The criterion for the age of S was that it should be recognized either as 35 years or older, or at least 15 years older than H. The sex of S must be identified. A neuter or wrong sex was not accepted for the C-phase.

The rationale for introducing S-identification criteria in the C-phase was that if we want to evaluate the perceptual achievement, then we must observe all the stimulus-reality aspects and enhance the discriminative power of the C-phase variable. It was expected that the final achievement of the perceptual performance would discriminate the relative level of the health and illness of the patients.

The Phases

The phases are divided on the basis of a pre-fixed schedule of exposures as follows:

- early phase - up to 6th exposure
- middle phase - 7 to 13th exposure
- late phase - 14th and above.

New and Modified Variables

D-phase

It was observed that some persons reported a dystonic perception (hence the name D-phase) which was an unspecified discomforting feeling before they came to identify the threat from S to H. This was a vague, unspecified perception of a discomforting situation. We debated whether it was a sub-conscious perception of the threatening stimulus, which was yet to be perceived more clearly. There were indications from the subsequent associations in therapy that the threatening stimulus was impinging vaguely at the time of such percepts.

While some persons progressed from a dystonic perception to a clearer perception of threat from S, some never progressed to the T-phase. There were others, who neither reached the T-phase nor even reported of any dystonic percept. Here we thought of introducing a positive dimension. We thought that in the absence of the T-phase, the D-phase could be a useful indicator to identify whether even a "disguised threat" was perceived or not. The argument was that those who reached the D-phase have a greater reality perception than those who did not even reach that. While the presence of the D-phase and its earlier perception, serves as a measure for relative perceptual achievement, the content of the dystonic perception could be analysed in the individual analysis.

Thus the D-phase is that exposure in which any unpleasant or discomforting stimulus, in absence of threat, was perceived in relation to H or S. For example, the environment is perceived as "sinister", S is perceived as suspicious or, H as sad or unhappy, or in some kind of danger, without specifying the threat.

H-Identification

It was observed that people tend to identify figures in successive stages. One-stroke identification was seen less frequently. To introduce the gradients, the identification of H is broken into separate units to register the perceptual achievement in varying degrees.

H age-correct

The number of exposures at which the age of H is correctly identified:

for series I : H age was considered to be correct, if given anywhere from 10 to 30 years,

for series II : H age was considered to be correct, if given anywhere from 10 to 35 years.

H sex-correct

The exposure at which the sex of H was correctly identified.

H first-ever identification

The number of exposures at which H was correctly identified for the first time. It is observed that, at times, people identify the figure correctly but subsequently misidentify it. Having passed through such fluctuations, the individual arrives at the established identification. Some, however, identify H correctly in an earlier exposure, yet their series ends with an incorrect identification. Some never identify S correctly. Could it be that in the former case, although they have the basic strength the psychopathological developments interfere with correct identification? We speculated that those who identified H correctly earlier, may have a greater ego-strength, than those who never identified it correctly.

Thus, H first-ever identification is the first time that H is identified correctly. Later on, the perception of H may be disrupted or H may be incorrectly identified. Needless to say, that in cases where no such set-backs occur, the exposure for first-ever identification and for correct identification established should be the same; but in cases of set-backs or fluctuations the exposure numbers for the two should be different.

H identification (established)

The exposure at which the identity of H is correctly established i.e., no fluctuation or misidentification occurs later.

S-Identification

Similar gradients like those for H are introduced here.

S age-correct

The exposure at which the age of S was correctly identified. For both of the series, S should be perceived as 35 years or older. If S is perceived as less, then S should be at least 15 years older than H. To cite an **atypical** example, if H and S both are perceived as 60 years old, then H is incorrect but S will be considered correctly identified?

S sex-correct

The exposure at which the sex of S is correctly identified.

S-awareness

In many cases, subjects before forming a definite percept of S, begin to notice that there is "something" in the stimulus area of S but they cannot be more specific than that. In many instances there is gradual progress from a vague "something" to a clearly identified person. The fact that the subject has become conscious of it and has paid attention to that "something". This is the first "milestone" in the perceptual progress towards the recognition of S. Moreover, it could serve as a positive score for those who never come to identify S as a person.

Thus, S-awareness is the exposure at which something (object or person - no matter how vague or unspecified) is perceived in the stimulus area of S.

Object-Identification

The phase at which H object is identified.

S-phase

There were instances when the subject would perceive S as a person but could not identify age or sex. The reason given, that there was not sufficient time for him to see that closely. However, later in the series, this process would lead to a specification of sex and age. We intended to mark this "milestone" of perceptual progress. This would also serve the purpose of marking a new development in the series when S enters in the perceptual field in some recognizable form and could be used in individual content analysis.

Thus, S-phase is the exposure in which a person or being is perceived in the stimulus area of S. The age or sex of which may or may not, as yet, be identified.

First-ever identification of S

The phase in which the age and sex of S was identified correctly for the first time. Later on, the perception of S may be disrupted or S may be incorrectly identified. It is therefore different from the identification of S established (for a fuller explanation refer to "first-ever identification of H").

Identification of S established

The exposure at which the identity of S is correctly established i.e., no fluctuation or misidentification occurs later.

External object-identification

The only external object in the series is the "table" in series I. Our interest was to observe whether a person focusses on the only figures, or whether he also becomes aware of the surrounding object as he focusses on the figures. Reasonably earlier perception of the external object may indicate that the individual has the "reserves" available to him and he can comfortably accommodate the surrounding object along with the figural perception. It was expected that this "milestone" among others

may indicate good perceptual achievement.

Thus, external object identification is the exposure at which the "table" in series I is identified.

Summary of DMT Variables for Perceptual Achievement

1. P-phase
2. Identification of H (established)
3. Identification of S (established)
4. Identification of H object
5. T-phase
6. C-phase
7. External object-identification
8. H object-awareness
9. D-phase
10. H-identification
 - (1) Age-identification
 - (2) Sex-identification
 - (3) First-ever identification
11. S-identification
 - (1) S-awareness
 - (2) S-phase
 - (3) Age-identification
 - (4) Sex-identification
 - (5) First-ever identification

Defense Signs Measures

The perceptual distortions, additions, and eliminations are given a formalized scoring system by Kragh in accordance with the psychoanalytic theory of defensive processes (refer to the Introduction). It has also been observed that certain defense signs are characteristically related to the diagnostic categories: "repression...has been registered as the predominant mechanism in anxiety hysterics, isolation as most typical of compulsive, etc." (Smith & Kragh 1970, p. 49).

In addition to the application of formal analysis of the defenses, we wondered if the overall high or low incidence of the defense codings indicated the "high" or "low" defensiveness of the patient. In order to examine this variable, a "total" number of defense signs was introduced as another measure. The observations leading to the construction of this measure are discussed below:

1. In some cases, the perceptual "distortions" and actual experiences in an individual's life were very similar. This emphasized the need for content analysis, independent of the defense analysis (discussed more fully in the content analysis).
2. "Identification with the opposite sex" and "polymorphous identification" in our preliminary exploration seemed to be entangled with personal identity, self-image, and the abnormal individual-parents relationships of childhood and contemporaneous period. In some cases, in which these defense signs were abundant, though the argument could be stretched to explain that they were using a particular kind of identification in defense, yet, in fact the other defense mechanisms seemed much more prominent in their behaviour. Therefore, the two signs

- were retained for coding as defense signs, but they were excluded from the measure of "defensiveness" (explained in observation no. 3). It seemed worthwhile to break them into separate units for content analysis (to be discussed later).
3. It was observed that the "signs" appeared profusely in the case of "slippery" patients i.e., patients who would resist the crucial interpretation made by the therapist. There are times, when the therapist begins to think that the patient would then really work through his problem at the next session, the patient introduces a new strategy of defense. We decided to consider the total number of defenses as a measure of "defensiveness". (As was stated above, this excluded two defenses, namely, identification with the opposite sex, and polymorphous identification). Therefore, a measure of defensiveness is the total (i.e., times appearing) of the remaining eight defenses.
 4. The total strength of defense signs in late phases was taken as another measure of defensiveness. This too, excludes identification with the opposite sex and polymorphous identification.
 5. The correspondence in the series and late-phase occurrence of a sign was taken as a measure of strength of that particular defense sign (this is in accordance with Kragh's scheme of analysis).

Summary of Variables for Defense Measure

- A. Total Occurrence of Defense Signs
 1. Total of defense 1 -
 2. Total of defense 2 -
(and so on upto)
 10. Total of defense 10 -
- B. Correspondence of Defense Signs in the Series
 1. Correspondence for defense 1 -
 2. Correspondence for defense 2 -
(and so on upto)
 10. Correspondence for defense 10 -
- C. Late-phase Occurrence of Defense Signs
(late-phase i.e., 14th exp. and above)
 1. defense 1
 2. defense 2
(and so on upto)
 10. defense 10
- D. Correspondence of Defense Signs in Late-Phases
 1. for defense 1
 2. for defense 2
(and so on upto)
 10. for defense 10
- E. Total of Defense Signs (this includes defenses 1 through 6, 9 and 10)
- F. Total of Late-Phase Defense Signs (this includes defenses 1 to 6, 9 and 10)

Content Analysis Measure

The investigator is well aware of the fact that DMT is a test to evaluate the defenses but that it is neither intended for a complete work-up of the case nor for a dynamic formulation of the patients problem. At any rate, from a close examination of our concept of dynamic formulation, the advantages of this technique become apparent. As stated earlier, self-experience and object-relations are central to our concept. This model is found helpful for psychotherapeutic work. We will now attempt to describe the status of a patient who is suffering from psychiatric illness. Though it would be an over-simplification, none-the-less, it explains the reason for our emphasis on the present model. When the patient is mal-adjusted to the extent that he seeks professional help, at that point it is observed that:

1. There is a disturbed self-organization. In other words, there is a disturbed self-image, identity, and perception of self with the result that the patient cannot be at peace with himself. The ego-functioning has failed to strike the optimal balance, and so the anxiety and the impulses intrude onto the consciousness with greater force. In response, the defenses are so intensified, that they interfere with normal functioning in the life-situation. This in turn, leads to further disturbed self-experience and self-perception.
2. There are disturbed object-relations. The pathological relationships are marked with excessive anxiety, defensive behaviour, and over-reactivity. The patient either does not develop, or he loses the capacity to form, sustain, and find any real satisfaction from personal relationships. The manifestation of the disturbance in object-relations is in the form of over-dependence, over-demanding and lack of commitment or withdrawal. These disturbed object-relations could stem from abnormal child-parental and subsequent relationships, traumatic and unhealthy situations or events, and faulty ego-functioning of the impulse/danger-anxiety-defense system.
3. There exist traumatic experiences with unresolved themes, feelings and conflicts, forcing unconscious repetition in an attempt for resolution. In this process, they further generate abnormal patterns of behaviour.
4. As a consequence of the intertwining of the above mentioned three factors, there is a formation of symptoms, such as depression, obsession, hypomania, etc., which further incapacitate the patient.

The following content of DMT could give information on disturbed self-experience, disturbed object-relations, traumatic experiences and unresolved themes, and symptoms as per the following scheme:

1. The perception of H, and all the content belonging to H-perception, could give some information on self-experience, self-perception, self-image, identity, and the like. During the exploration with personal patients, some verbalized "this (referring to H) looks like when I am depressed", or "this is

like the time when I was very young" and so on. This led us to speculate, that H-perception is the representation of self. During the study we had investigated this aspect.

2. The perception of S, or H and S, together, could give information on object-relations. The personal patients verbalized, "this (referring to S) reminded me of my mother, then", or "this is like my father when he looked at me", and so on. This led us to believe that perception of S is the representation of the object. Thus, in H and S perception, we have self and object representations which could together give us information on the relationship of the two. It ought to be mentioned here that these verbalizations were made during testing and also during therapeutic sessions subsequent to the testing. In the latter case, patients had sufficient opportunity to reflect on such matters. Such verbalizations would not be expected in regular testing situations, for it appeared certain from the post-testing situation that the pictures provoked feelings and associations about themselves, their parents, and/or close friends.
3. Feelings, events, and activities ascribed to H and S could give information on traumatic experiences, unresolved themes, and conflicts of object-relations. This point was brought home dramatically in the case of two of my personal patients, whereby, the percept-genetic method introduced new, and hitherto repressed material. We reasoned that there was something in the process of seeing the two figures at a relative degree of awareness which revived these experiences and brought them to the surface.
4. Some unusual, uncalled for features (which the investigator has termed as "idiosyncratic features", for want of a better term) could give information on the symptomatic conditions. These features resembled symptomatic behaviour and they were also similar to response tendencies observed during conventional picture-projection tests (elaborated in Hypotheses and Criteria - Study 1).

In order to analyse self-experience, object-relations, unresolved feelings and conflicts, and symptomatic manifestations, we now need to spell out our strategy in greater length. It operates on the basic assumptions that the patient will project his self-image and identity, traumatic self-experiences, and disturbed object-relations onto the figures. Thus, according to this strategy, the figural perception needs to be analysed very closely and with a special bias that has been outlined so far.

Analysis of Figural Perception

1. Identification of figures must be analysed per se, quite apart from the defense signs (i.e., defense 7 and 8).
2. Relative strength of identification (or misidentification) must be analysed e.g., how many times did the patient identify H as...?
3. All variations in H and S, in terms of age, sex, activity, appearance, etc., must be analysed.

4. (a) Feelings or feeling tone expressed in relation to H or S must be analysed.
 (b) Any "conflicts" or "themes" perceived in relation to the figures must be analysed.
5. Any other "idiosyncratic features" in relation to perception of figures, other than the ones mentioned above, must be analysed.

We will now discuss each of these principles more fully:

Identification of Figures

As was mentioned in the Defense Signs, the content of identification, at times, corresponded with the individual's image, his identity, and his image of parents and parental relationship and that of other intimate relationships. We decided to examine the content of identification, i.e., what are the figures identified with?

The most obvious content of identification is in terms of age and sex. It is simpler to identify it separately each time than could possibly have been done under defense sign analysis. The defense signs are coded at the convergence of several conditions. In other words, they are multi-determined. Identification with the opposite sex could be coded if H sex is in keeping with an opposite sex-symbol object or opposite-sex animal, or when both H and S are of opposite sex. Conditions that ought to converge here are as follows: an object or animal should be perceived along with H (which ought to be misidentified), H sex ought to be at first perceived correctly and then incorrectly, or it should be incorrect in total phases or, the sex of both figures should be perceived incorrectly. Similarly, polymorphous identification is also multi-determined. The logic behind this scheme of coding is understandable, as the defense sign is formed on the basis of intensive distortion and therefore has to be multi-determined. However, this scheme would be inappropriate to study identification per se. We may categorize the atypical age and sex identification as follows:

H-Identification

- (1) H identified as a child (H-Identification with Younger-Age)
 The criteria for age are given in "Perceptual achievement for H and S".
- (2) H identified as an old person (H-Identification with Older-Age).
- (3) H identified with opposite sex e.g., male H is identified as female (H-Identification with Opposite-Sex).
- (4) H identified as two persons, both of whom could be of the same sex or of either sex (Double-Perception).

S-Identification

- (1) S identified as a young person (S-Identification with Younger-Age).
- (2) S identified with opposite sex (S-Identification with Opposite-Sex).
- (3) S identified as two persons, both of whom could be of the same sex or of either sex (Double Perception).

Relative Strength of Identification

It is usual to now and then identify the figures for sex and age incorrectly before one arrives at correct (established) identification of figures. Of special interest is whether patients reveal any atypical patterns. In order to determine whether a pattern of identification should be considered atypical, the number of such must be noted, for it may indicate the relative strength of such identifications. The term "relative" is used for comparison among patients. However, for the purpose of this investigation, we had to assign some quantitative value for atypical identifications which we could do only on the basis of the "cues" available to us at the time of the investigation. In our observations, meaningful information was forthcoming about a person's self-image and identity even though he did not reach as high a number as was prescribed for identification defense signs. In order to determine the "pattern" of identification, we decided to modify the "sign" criteria by half. In other words, while the sign requires 12 incorrect identifications, the pattern of atypical identification may be judged by 12 such identifications, for both series combined. We had considered the series after the 10th exposure as one with greater stimulus loading. A total of 6 such identifications in both series after the 10th exposure may also indicate the pattern of atypical identification.

The content of identification is thus quantified to judge the pattern of atypical identification.

List of atypical patterns of identification

H-Identification

1. Atypical younger-age identification
2. Atypical older-age identification
3. Atypical opposite-sex identification
4. Double-perception (when it is seen twice in the series)

S-Identification

1. Atypical younger-age identification
2. Atypical opposite-sex identification
3. Double-perception (when it is seen twice in the series)

Variations in Figural Perception

During the series, variations in H and S in terms of age, sex, activity, and appearance are noted. Activity and appearance have, at times, highly individualized content which does not lend itself easily for categorization or for statistical comparisons. The analysis of all such variations could be done in individual cases in light of more complete information about the patient. However, frequent variability of H and S in terms of age and sex interested us. It appeared to indicate a disturbance in the identity of the individual or in his relationship with basic objects. From our observations of personal patients, two or three variations seemed a normal occurrence, but more variations were seen in cases of identity-disturbance and in those who had a hostile relationship with parents.

Thus, the criterion for significant variation is 4 or more variations in sex or age alone in a series.

List of significant variations:

H-variation:

1. for age (age-variability)
2. for sex (sex-variability)

S-variation:

1. for age (age-variability)
2. for sex (sex-variability)

Feelings or Feeling-tone in Relation to Figures

In many instances, personal patients expressed feelings towards H such as "oh, he looks nice and gentle" or "she is a good girl" or there was an expression of a negative feeling, such as "it is most annoying, the way he just sits there and looks". In our view, it reflected the general feeling-tone that one directs towards oneself and that it is provoked by the phenomenon of self represented in H. We decided to categorize the feelings expressed towards H in two broad categories:

- (1) Positive feeling expressed toward H
- (2) Negative feeling expressed toward H

Conflicts and Themes Expressed in Relation to Figures

As outlined earlier, experience must be separated from defense, at least for a dynamic formulation of the problem. The content must be analysed per se, independent of the defense perspective. If this is not done, the experience may be lost sight of. Perhaps an example would be in order here; what may be coded as reaction-formation in an early phase of the series, may actually be an expression of a healthy, satisfying experience with the basic object. In another case, the hero may be perceived in danger while it may be an unconscious repetition of an actual traumatic experience in the life of the individual, or a percept which may be coded as identification with the aggressor, may have been a response to an actual violent, fearful situation in the family in which the individual had to defend himself. In a clinical population, such dramatic life-situations are not rare and patients in psychotherapy return to these experiences for "working through". We observed that, at times, patients have introduced a conflict or a theme in the series which had similarities with an important personal experience, emotional change, or with a new development in object-relations.

In our view, the inter-linking of experience with defense analysis could lead to interpretation of basic emotional conflict. The analysis of content would explain the circumstances of defense to complete the circuit of impulse/danger-anxiety-defense. To a large extent, this kind of material differs from one patient to another and is therefore difficult to categorize. However, the following content impressed us for its implications of self-experience and developments in object-relations:

1. H in Danger: when the central figure is perceived in some kind of danger (before the 10th exposure) in the series, it is then assumed that if there has been any such traumatic expe-

rience, it is generally reported in childhood and appears quite early in the series.

2. H-Threatening: when H is perceived threatening or is perceived as an agent of fear.
3. H-Smiling: when H is perceived smiling with or without cheerfulness. The environment may or may not be seen as cheerful.
4. S-Dystonic: when S is perceived hurt, sick, or in pain.

Idiosyncratic Features

Some responses from personal patients drew our attention because they appeared similar to symptomatic behaviour. Similar responses were also observed on conventional picture-projection tests, such as Rorschach, TAT, Object-relations Test, etc. We decided to examine them for possible correlations with symptomatic conditions and diagnostic categories. Only those features were picked out which appeared frequently and resembled symptomatic behaviour.

1. Detailistic Percepts: i.e., the perception of tiny, minute details. Obsessional patients tended to perceive the same minute details at times correctly and at other times incorrectly. What especially interested us was the emphasis on such small details. This had a resemblance to the obsessional symptom of meticulousness. It also bears resemblance to the responses on Rorschach of small detail i.e., (d) which is associated with the psychopathological condition of obsessiveness.
2. Darkness Percepts: i.e., perception of darkness in some part of the stimulus-field. In Rorschach the shading responses are associated with anxiety while the black colour percepts are associated with affectional needs and depression. On the Object-Relations Test (Phillipson), the shading and darkness indicate sensitivity in feelings, anxiety and depression.
3. Size-Change Percepts: i.e., perception of change in size (increase or decrease) of a figure or of an object. In the context of self-experience, it would be analogous to over-cathexis (over-valuation) and under-cathexis (under-valuation) of one's self-image. In psychopathological context, it would be analogous to the "high and low" phenomenon of a cyclothymic condition. However, both concepts are not exclusive, as the self-image of a patient varies from one extreme to another during "high" and "low" moods.

Summary of the Content-Analysis Variables

Figural Identification

1. H Younger-Age Identification (atypical)
2. H Older-Age Identification (atypical)
3. H-Identification with Opposite-sex
4. Double-perception
5. S-Identification with Younger-Age (atypical)
6. S-Identification with Opposite-sex

Variation

1. H Age-Variability

2. H Sex-Variability
3. S Age-Variability
4. S Sex-Variability

Feelings in Relation to H

1. Positive Feeling
2. Negative Feeling

Conflicts and Themes

1. H in Danger
2. H-Threatening
3. H Smiling
4. S-Dystonic

Other Features

1. Detailistic Perception
2. Darkness Perception
3. Size-change Perception

The following observations, made by the investigator and the therapists, indicate the nature of patients' involvement with the task:

1. Subject's perception

The therapist's suggestion to the patient for participation in the investigation was perceived and interpreted by him in the context of therapy e.g., "is my therapist doubtful about my progress?", "is my therapist preparing for the termination of the treatment?", etc. Therefore the DMT performance was largely perceived as a communication to the therapist.

A patient expected that his feelings and percepts to the pictures would be communicated to his therapist. Some patients expressed anxiety concerning the status of their recovery when they realized that what they saw at the optimal exposures was so different from their perception of the early exposures. The patients also wondered what the therapist would think about his percepts and of the emotions which the pictures mobilized in him. Most of the patients expected that there would be a discussion between the therapists and the investigator with regard to their performance.

2. Subject's motivation

By and large, we are of the opinion that it was a highly motivated group. The patients were motivated for different reasons. There were patients who had come to "help myself" through the investigation, and there were patients who had come with the missionary spirit to help "the psychological sciences", and "mental health". To illustrate the point, we quote a patient who said: "I have felt so much benefitted by psychological treatment, that I would like to help others who are suffering. I hope this research helps them".

The influencing factors mentioned here are specific to the locus and the modus operandi of this study. It is a three-person

experimental situation compared to the usual two-person situation in the laboratory. In this investigation, the patients perceive DMT as an event pertaining to the therapy while the therapists consider it as an extraneous event.

ANB SELF-RATING SCALE

The scale was constructed by the investigator for the purpose of obtaining subjective perception of the individual, regarding the status of his own adaptive and non-adaptive behaviour. Self-rating scales or other forms of subjective data have been used in Q-techniques. Stephenson (1936) recommended a method in which each subject makes "questionnaire like statements" about himself. This according to Stephenson may be included as a supplementary source of information in Q-techniques. We intended to use self-ratings in the analysis of Q-factors, in fact, we had no other subjective data from the patients.

At the time of the investigation there was no self-rating scale available to meet our requirements for the rating of the adaptive and non-adaptive behaviour. These ratings were important to us because of our interest in evaluating the validity of DMT variables for the status of ego functioning. As we planned to feed a large number of "perceptual achievement" and "defense signs" measures for Q-factor analysis, we were interested in examining the relationship of DMT variables to the patient's self-ratings of his adaptive and non-adaptive behaviour.

Items Selection

A conceptual understanding of adaptive and non-adaptive behaviour, formed the basis for selection, arrived at by a study of the following:

1. Concept of ego and adaptation (Hartmann 1958, 1964)
2. Concept of coping (Murphy 1959, 1962)
3. Concept of coping and defenses (Haan 1963, 1969 and Kroeber 1963)
4. Concept of competence (White 1959, 1960)
5. Concept of developmental tasks (Havighurst 1953)

The items selected for adaptive behaviour are those which supposedly enable a person to deal effectively and positively with the environment. The items selected for non-adaptive behaviour are those which supposedly interfere with dealing effectively and positively with the environment.

The scale

The scale consists of 87 statements to be rated on a 7-point scale. The statements are in first person e.g., "I have interests and hobbies which offer me satisfaction", "I tackle problems rather than ignore them", "when things go badly, I get run down", etc. The 7-point scale is bipolar. It consists of the scale statements of "exactly like me" at one end, and "extremely unlike me" on the other, with "neutral" in the middle. The instructions for the 7-point scale were adapted from Osgood, Suci and Tannebaum (1957).

The items are classified for the sub-dimensions of the adaptive and non-adaptive behaviour.

Sub-dimensions of Adaptive Behaviour

1. Adaptive attitudes: i.e., the inclination and the tendency to approach and tackle the tasks rather than avoiding or succumbing to them.
Examples: "I fight adversity rather than let it overtake me", "I have continually tried to overcome my faults".
 22 statements fall in this category.
2. Adaptive-cognitive: i.e., the tendency to know and assess a situation or a feeling realistically and objectively.
Examples: "I would like to know all the facts no matter how unpleasant they may be", "I make attempts to know completely the problem I am facing".
 8 statements fall in this category.
3. Adaptive control-expression: i.e., the tendency to express and control oneself in a way which is conducive to an optimal adjustment. "Control" implies the delaying of gratification or discharge of an impulse in situations where such actions may not be in the best interests of the individual. "Expression" implies the discharge of an impulse, release of tension, communication to another person of one's feelings, etc., at the right opportunity and in socially acceptable manners.
Examples: "When I am angry, I can show it without flying off the handle", "when I am angry or upset about something, I wait until the right time and place before I show it", or "I have interests and hobbies which offer me satisfaction", etc.
 8 statements fall in this category.

Total Adaptive Behaviour is the sum of the items of adaptive attitudes + adaptive-cognitive + adaptive control-expression. In all there are 38 statements which refer to adaptive behaviour.

Sub-dimensions of Non-Adaptive Behaviour

1. Mal-adaptive response: refers to the tendency which hampers the course of adaptation and adjustment to people, situations, and circumstances.
Examples: "In a crisis I am inactive, riddled with doubt and indecisive", "I feel that things will take care of themselves", etc.
 14 statements fall in this category.
2. Dyscognitive-evaluative: behaviour or tendencies which prevent the correct cognition and evaluation of a situation or feeling.
Examples: "When I am upset I can no longer imagine what others feel or think", "I do not know why I do the things I do".
 17 statements fall in this category.
3. Overcontrol and suppression: refers to the behaviour or tendency to overcontrol and suppress feelings, self-expression, and memory.
Examples: "I have never felt absolutely furious with anybody",

"No matter how unkind people have been to me I forgive them".
6 statements fall in this category.

4. Experienced anxiety: refers to the generalized anxiety. It is included with the assumption that excessive anxiety can become non-adaptive.

Examples: "I get startled by sudden noises", "little things worry me", etc.

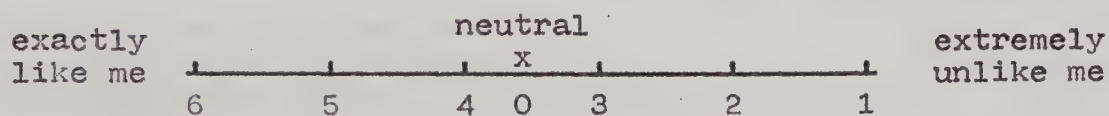
5 statements fall in this category.

Total Non-Adaptive Behaviour is the sum of the items of mal-adaptive + dyscognitive-evaluative + overcontrol and suppression + experienced anxiety.

In all, there are 42 statements which refer to the non-adaptive behaviour.

Sum of ratings for adaptive and non-adaptive behaviour

Numerical values were to be assigned for the scale points in the following way:



According to this scheme of numerical values, the higher number can always indicate the "strength" of that sub-dimension, whether it is a sub-dimension of adaptive or of non-adaptive behaviour. For example, the higher sum of rating points for "cognitive-evaluative" sub-dimension will indicate that the individual rates himself higher for "cognitive-evaluative". Similarly, if it is a case of a higher sum of ratings for "dyscognitive-evaluative" sub-dimension, that too will indicate that the individual rates himself higher for "dyscognitive-evaluative".

The rating points were to be computed for each sub-dimension and for the total adaptive and non-adaptive behaviour. Therefore the computation of rating points offers the following variables:

1. Sum of adaptive attitudes rating points
2. Sum of adaptive-cognitive rating points
3. Sum of adaptive control-expression rating points
4. Sum of total adaptive behaviour rating points
5. Sum of mal-adaptive response rating points
6. Sum of dyscognitive-evaluative rating points
7. Sum of overcontrol and suppression rating points
8. Sum of experienced anxiety rating points
9. Sum of total non-adaptive behaviour rating points

The "response tendency" and "desirability factor" analysis of the self-ratings

The response tendency or style and the influence of the social desirability on self-ratings, are widely discussed. Guilford (1954) has listed some "peculiarities of ratings" (pp. 294-296). Attention is drawn to the following which pertain to

the desirability factor and rating tendency: "raters do not always overestimate themselves in desirable traits", "there are individuals who overestimate themselves in all traits and others who underestimate themselves in all traits", "self-ratings are too high on desirable traits and too low on undesirable traits". Nunally (1967) lists the study of the "response style" as a method for the measurement of the personality. Two out of the three response styles, mentioned by Nunnally, are: "cautiousness" and "extremeness" (p. 510).

In order to make a more comprehensive analysis of self-ratings, we decided to analyse the "response tendency" and the "desirability-factor", as well as the analysis of the sum of the rating points for the adaptive and non-adaptive behaviour.

Desirability-factor analysis

Primarily based on the subjective impression of two psychologist colleagues, the 87 statements were classified as:

	number of statements in the self-rating test
1. desirable statements	42
2. undesirable statements	27
3. neutral statements i.e., those which cannot be clearly clas- sified as desirable or undesir- able statements	18
	87

Some examples from the self-rating scale of desirable, undesirable and neutral statements

a) desirable statements

"I am free from prejudices of all kinds"
 "I am good in foreseeing if there is anything important in the offing"
 "I can keep cool"
 "I take account of other people's feelings in my relationships", etc.

b) undesirable statements

"My thoughts get muddled"
 "When things go badly, I get run down"
 "In a crisis I am inactive, riddled with doubts and indecisions"
 "I cannot cope", etc.

c) neutral statements

"Ideas and thoughts just pop up in my mind"
 "I get annoyed that most of the people I meet are the same type of persons"
 "I just can't bear things to be untidy or messy"
 "I feel that things will take care of themselves", etc.

Scoring

Ratings in the direction of "exactly like me" are to be given positive scores. Ratings in the direction of "extremely unlike me" are to be given negative scores. "Neutral" was to be treated as zero score. Therefore all the scores were assigned as follows:

exactly like me	neutral						extremely unlike me
	(+3)	(+2)	(+1)	(0)	(-1)	(-2)	(-3)

Each statement could yield a score between +3 to -3. We decided to have a sum of scores for each of the three categories (after deducting the total of minus scores from the plus scores for each category).

Computation of scores yield the following variables:

1. Sum of scores on desirable statements
2. Sum of scores on undesirable statements
3. Sum of scores on neutral statements

(Note: the complete list of statements for each category is appended).

Response tendency analysis

Three response tendencies were picked for analysis: (I) how many times a person rated a statement "exactly like me", (II) how many times a person rated a statement "extremely unlike me", and (III) how many times a person rated a statement "neutral". The three response tendencies are called the "like extreme", the "unlike extreme", and the "neutral".

The scores for each response tendency were computed. Furthermore, we thought that the response tendencies in themselves were not adequate. It was also important to see to what kind of statement people tended to rate: "like extreme", "unlike extreme" or "neutral". We had classified all the statements in three categories: (I) desirable statements, (II) undesirable statements, (III) neutral statements. We computed the scores for response tendencies for all three categories of statements.

	desirable statements	undesirable statements	neutral statements
number of "like extreme" ratings			
number of "unlike extreme" ratings			
number of "neutral" ratings			

Computation of ratings offers the following variables:

1. Number of the "like extreme" ratings
2. Number of the "unlike extreme" ratings
3. Number of the "neutral" ratings
4. Total number of extreme ratings ("like extreme" + "unlike extreme" ratings)

On Desirable statements

5. Number of the "like extreme" ratings
6. Number of the "unlike extreme" ratings
7. Number of the "neutral" ratings

On Undesirable statements

8. Number of the "like extreme" ratings
9. Number of the "unlike extreme" ratings
10. Number of the "neutral" ratings

INTERVIEWS WITH THE THERAPISTS

Problems Encountered in Collecting Clinical Data

The clinical data is highly dependent on therapist supplied material. By selecting members of professional bodies and institutions engaged in psychodynamic psychotherapy, an attempt was made to ensure a minimal degree of training and experience. It can be assumed that they would all share the dynamic point of view of metapsychology. However, within the psychodynamic psychotherapeutic framework, there are many models and diverse concepts. The psychodynamics can be conceptualized at different levels. It is difficult if not impossible to collect material with one set of definitions of metapsychological concepts.

The investigator was playing the dual role of DMT administrator and analyser and the clinical data gatherer. As the clinical data was the validity criteria, the reliability of the findings would largely depend on therapist supplied material. Direct question with regard to psychodynamic variables can be highly suggestive and reduce the reliability of the data.

It was expected that in light of the DMT responses of the patients, specific interests and preoccupations would vary from one case to another. Directed questions may inadvertently arise out of such observations and influence the objective process of enquiry.

We decided to use the interview technique with a set of uniform open-ended questions. Care was taken to ask a small number of questions but they were so framed that they covered the important aspects of object-relations and self-organization. We also attempted to avoid intermittent questions as they run the risk of self-fulfilling prophecies. Intermittent questions were asked only if the therapist omitted an important aspect of the patient's life. The questions were structured so that they could elicit the descriptions and the factual accounts of events and experiences as well as draw the psychodynamical formulations. All interviews were taped to allow a spontaneous flow of the material. The interviews were carried out as per the interview schema.

The Interview Schema

The following particulars about the patient were noted before or after the interview:

1. Identification-data such as the age, sex, time of referral, etc.
2. Referral problem for which the patient referred to the therapist. (If he was referred by another agency, the referral problem as it was formulated by the agency).
3. Past and/or current diagnosis.
4. Period and frequency of psychotherapeutic treatment with the present therapist.

The following open-ended questions were asked:

- Q. "How would you clinically describe your patient and his/her problem?"
(If the therapist did not cover the development of the illness and the symptoms from the past to the present status, a question was asked to describe the progress of the illness in the past. The material in response to this question offers the "clinical description").
- Q. "Now that you have given a clinical description, would you also psychodynamically describe his/her problems as you formulate them?"
(The material in response to this question offers the "psychodynamical descriptions").
- Q. "What kind of family experience and background did the patient have?"
(A detailed account of events and situations was taken. If the therapist omitted any important aspect of object-relations, such as parent-child, parent-parent relationship, a question was asked about the nature of these relationships. Each relationship was to be covered for the three phases of life, namely childhood, adolescence and adulthood. If a particular phase was omitted, a question was asked about the family situation and the nature of the object relationships at that phase. The material in response to this question offers the "family experience and background").
- Q. "I want to have an idea of his life development or, in other words, what kind of important experiences, events and phases he has passed through. Could you provide, say a sketch of his historical development?"
(The three phases: childhood, adolescence and adulthood, up to the present time, were to be covered. A question was asked about the life-phase, if any, was omitted by the therapist. If events were described without a comment on the individual's subjective experience, a question was asked about the impact of the events on the individual. The material in response to these questions, offers the "historical development").
- Q. "Let us now approach the treatment aspect. How would you describe the therapeutic process and the various therapeutic phases, he/she has gone through up till now?"
(If the therapist omitted the description of the transference at various phases of the treatment, a question was asked to

that effect. Towards the end of the response to this question, another was asked about the therapeutic gains and the likely outcome of the treatment. The material in response to this question offers the "therapeutic process and outcome").

- Q. "Every patient has some health and some illness. That is, he has certain strengths and weaknesses with which a therapist has to work. Would you describe what his/her strengths and weaknesses are?"

(The material in response to this question offers "strengths and weaknesses").

- Q. This last question refers to the defenses. "What characteristic defenses does he use in therapy and outside life situations? Let me add a rejoinder to this question. I am aware that therapists conceptualize defenses according to their orientation. I am studying some of the classical defenses, namely, repression, isolation, denial, reaction, formation, identification with aggressor, turning against self, identification as a defense, projection and regression. While you would describe the characteristic defenses as per your conceptualization, for the purpose of my investigation, I would appreciate it if you could, rather, relate them to the defenses I have mentioned. Could you also describe the characteristic defenses he/she uses in therapy and outside life?"

(The material in response to this question offers "characteristic defenses").

The listing of defenses marked the end of the interview. The method of the interview demanded skillful judgement to decide when to say "uhm...uhm" or, say "very interesting, please go on" or when similar devices should be used to encourage the therapist to give more material and when to ask the next question. This demanded sound judgement on the part of the interviewer, to sense of the material given by the therapist is complete and when it was time to ask the next question.

Let us examine how data from various sections of the interview feed the desired information for the analysis of self-organization and the object-relations.

1. Clinical description

It provides information on the status and history of illness in the past, and the developments and the changes up to the present status of the illness. We have three categories of information obtained from the clinical description:

- (a) clinical description given by the therapist,
- (b) diagnostic classification given by two independent raters,
- (c) referral problems given by the patients, at the time of approaching the therapists.

This material provides data on "psychopathological manifestations" included under the status of ego-functioning.

2. Psychodynamical description

It is a dynamic formulation of the cause of the present psychopathological condition, with descriptions of the underlying conflicts and unresolved problems, which have resulted

into the present condition. Therefore, it provides data on self-experience, self-image, status of ego-functioning, and the patterns of object-relations.

3. Family experience and background

It provides information on situations and events in the family such as death, separation, divorce, marital tension, rows, etc. It also provides information on intra-familial relationships, namely, the parent-parent, parents-child, child-parents, and child-siblings relationships at various phases of the individual's life. This material provides data on self-experience and on object-relations.

4. Historical development

It provides chronological age-wise information on important experiences and events in the individual's life. It registers the important developments and changes in the environmental and psychic life of the individual. The information under this section, when combined with family experience and background, supplies extensive data on self-experience, self-image, identity and object-relations.

5. Therapeutic process

It provides information on the repetition and manifestation of important self-experiences and of patterns of object-relations during the here-and-now situation of the therapeutic process. The emotional behaviour and transference, in relation to the therapist, the working alliance with the therapist, the therapist's satisfaction with the treatment, and the likely outcome of the treatment are described under this section. This material provides data on self-experience, status of ego-functioning, and the patterns of object-relations.

6. Strengths and weaknesses

It provides the descriptions and listing of the strengths and the weaknesses. The strengths are those which help the individual to cope with stress, to adjust to life situations, and to benefit from the therapeutic process. It provides data on the status of the ego-functioning.

7. Characteristic defenses

It provides the listing of the characteristic defenses employed by the patient in therapy and the life-situation. Along with the listing of the defenses, often an illustration of the defensive behaviour is supplied, on the basis of which the therapist has identified the the defenses. This material supplies data on the characteristic defenses.

To facilitate the analysis of the interview data for object-relations and aspects of self-organization (refer to our evaluation-model), the following interview content-analysis schema were prepared:

(a) "Events and Situations"

- (b) "Objects' Relationship with the Individual"
- (c) "Individual's Self-experience and Relationship with the Objects"
- (d) "Present Status"

To identify the life-phases in which events, experiences, and relationships were reported to have occurred, a coding system was introduced in the analysis schema. Interview content-analysis schema are appended.

RATINGS BY THE THERAPISTS

To complement the qualitative and descriptive data obtained by the interview method, two scales were designed to permit objective ratings by the therapists, namely, the A.A. Rating Scale and the D.M. Rating Scale.

A.A. Rating Scale

Dimensions of adaptive and defensive behaviour were important to us because of our objective to evaluate the validity of DMT variables for the status of ego-functioning. During the interview, qualitative data was obtained on the "strengths" and "weaknesses" of the patient. The scale was constructed, by the investigator, to permit objective ratings of the patient's adaptive abilities.

Selection of items

Adaptive abilities are conceptualized and defined on the basis of the concepts of adaptation and coping which were mentioned in the ANB Self-Rating Scale.

Seven adaptive abilities were included in the A.A. Rating Scale:

1. Adaptive cognition
2. Empathy and emotional understanding of others
3. Recognition and acceptance
4. Self-dependability
5. Flexibility and resilience
6. Constructive drive expression
7. Constructive drive control

Abilities 1 and 2 refer to the "reality testing" function of the ego. Abilities 3-5 refer to the "organizing and self-regulating" functions of the ego. Abilities 6 and 7 refer to the "economic" functions of the ego i.e., the function of the ego to mediate between "id" and "superego" and allow the individual to derive some pleasure and satisfaction.

The adaptive abilities were rated on a 5-point scale with the "low" at one end and "high" at the other.

The rating values

The rating points are converted into values, thusly:

- rating of "low" = 1
- rating of "high" = 5
- the intermediary rating points have the corresponding values of 2, 3, and 4.

Each adaptive ability could have a value between 1-5.

Total adaptive abilities ratings = the total of the values of the seven adaptive abilities

- minimal value = 7 (if each of the seven abilities obtains a value of 1)
 - maximal value = 35 (if each of the abilities obtains a value of 5)
- The values obtained by the ratings were intended to be used in the analysis of the status of the ego-functioning. The scale is appended with the report.

D.M. Rating Scale

During the interview, the therapists were asked to identify only the characteristic defenses of the patients. The interview data was not intended to yield information on the status of those defenses which were not "characteristic defenses". In order to permit objective ratings for all the major defenses, the D.M. Rating Scale was constructed by the investigator.

The following defenses were included in the scale:

- Repression
- Isolation
- Denial
- Reaction Formation
- Turning Against Self
- Projection
- Regression

Three defenses viz., "Identification with the Aggressor", "Identification with the Opposite-sex", and the "Polymorphous Identification" were excluded on subjective impressions. It was the subjective impression of the investigator, that the above three defenses were "dated". The therapists conceptualize patients' behaviour relatively less frequently in terms of these defenses. In our view, the inclusion of these defenses would have produced some "alienation effect".

Defense mechanisms were rated on the 5-point scale from "low" at one end to the "high" at the other.

The rating values

The rating points are converted into values, thusly:

- rating of "low" = 1
- rating of "high" = 5
- the intermediary rating points have the corresponding values of 2, 3, and 4.

Each defense mechanism could have a value between 1-5.

Total defenses ratings = the total of the values of the seven defense mechanisms.

- minimal value = 7 (if each of the seven defense mechanisms obtains a value of 1)
- maximal value = 35 (if each of the seven defense mechanisms obtains a value of 5)

The quantitative values obtained by the ratings were intended to be used in the analysis of the status of the ego-functioning. The scale is appended with the report.

The Personality and the DMT Variables

In view of the general assumptions, the following clinical dimensions of Object-Relations and the Self-Organization were selected for the personality variables. The DMT variables were selected for their hypothetical occurrence with the personality variables. Specific assumptions for each variable will be presented later. Here only an overview is given.

The Object-Relations

Disturbed environmental object-relations

Six variables for disturbed environmental object-relations were selected for investigation. The disturbed environmental object-relations were to be examined with the DMT variables of atypical figural identification.

Environmental object-relations were expected to determine the degree of identification with the objects and facilitate the ego development (refer to Implications of the Object-Relations Theory, implications 2 and 3, and the Postulates of the Working-Model, postulates 1 and 2).

The figural identifications may indicate whether the ego has achieved an identity of its own or, if the identification is still preponderantly with the mother object or the father object.

The Self-Organization

Traumatic self-experiences

Two variables of traumatic self-experiences were selected for investigation. Traumatic self-experiences in the outer reality were to be examined with the percepts of traumatic situations involving H in the DMT.

The traumatic self-experiences have a basis in the object-relations of the outer reality (refer to the object-relations theory "all major psychic experiences and the emotions are object-relational" and the Postulates of the Working-Model, postulates 4 and 1).

The "attacking object" and the "attacked ego" situation of DMT is likely to reactivate the traumatic experiences suffered

by the individual in the environmental object-relations. The traumatic situations involving H may indicate if the individual has suffered similar experiences in the outer reality.

Disturbed self-image

Three variables of disturbed self-image and self-esteem were selected for investigation. Disturbed self-image of the individual in actual life was to be examined with image disturbances in figural-identification and with the expression of the positive and the negative feelings towards H.

The positive and negative self-image depends on the aggressive and libidinal ego-cathexis, which in turn, depends on the object-cathexis and the objects' relationship with the individual (refer to the Postulates of the Working-Model, postulate 3). Disturbance in the self-image implies that there has been a mix-up in the object-relationships, and as a consequence of it an excessive libidinal or aggressive ego-cathexis has taken place. The self-object situation in DMT may activate a process in which the overlibidinized and overaggressive ego-cathexis is likely to surface in relation to the figures.

Expressions of positive and negative feelings towards H, and image disturbances in the figural-identification, may indicate the disturbed self-image and self-esteem.

Status of ego-functioning

Status of adult-adequate behaviour, defensive behaviour, and psychopathological manifestations were to be examined with the stimulus-adequate figural-identification, defense signs, and some perceptual features interfering with the perceptual achievement.

The central ego is the apparatus which acts as the "perceiver" (refer to Endo-Psychic Structure of Object-Relations Theory). For the purpose of adaptation, reality testing is an important function of the ego, which in turn, operates on the reality principle (refer to Features of the Object-Relations Theory, feature 8).

However, the dynamic activity of the ego-structures may

interfere with the reality testing, and consequently distort the stimulus-reality.

In certain conditions, deteriorative ego-functions may take over to relieve tensions and provide compensatory satisfactions (refer to feature 8 of the Object-Relations Theory). The concept, that reality testing function is a measure of ego-strength and ego-weakness, is described in the "Analysis Scheme of the DMT Measure".

Stimulus-adequate figural-identification, the perceptual "distortions" (i.e., the defense signs) and perceptual features, which interfere with the perceptual achievement, may indicate how far the ego is allowed to carry out its function of reality-testing. The DMT variables mentioned above are expected to indicate the status of ego-functioning.

HYPOTHESES AND CRITERIA FOR PERSONALITY AND DMT VARIABLES

The Disturbed Environmental Object-Relations

(the hypotheses and the criteria for disturbed environmental object-relations and DMT variables)

A. "Excessive preoccupation and dependence on parents"- "Atypical older-age identification of H"

Hypothesis 1: "Atypical (repeatedly) older-age identification of H is positively related to the object-relations pattern of excessive preoccupation with, and dependence on parent-objects".

Assumption: Underlying the excessive preoccupation and dependence on parents is the strong identification with the parents-object. Such strong residual identification with parent-objects will appear in the percept-genesis of H.

(Note: H is assumed to be the representation of the self.

H shall be identified with the person of an older-age as the parts of the self are still strongly identified with the parent-objects).

Criteria

Excessive preoccupation with and dependence on parents

Normally, in the case of an adult, it is expected that the ego has separated from the parent-objects and cathected

in the persons outside the family. In disturbed object-relations, such differentiation of self from the parent-objects and cathexis of other objects may not have taken place. The subsidiary egos may still be strongly attached with the libidinal and aggressive aspects of the parent-objects.

Presence of the above state could be inferred from the following conditions:

1. Parent-objects continue to be still binding, in result, the individual is unable to physically separate from them.
2. Parent-objects continue to be frustrating.
3. Parent-objects continue to be exciting.
4. Frustrating and exciting aspects of the objects cause psychopathological developments for which parents may be held responsible, by the individual.
5. Relative lack of cathexis of other objects when compared to the cathexis of the parent-objects.

Signs

1. Patient is currently living with parent/parents.
2. Descriptions of current preoccupation with angry, hostile phantasies or thoughts about parent/parents are available in the therapist's report.
3. Descriptions of current erotic thoughts and phantasies in relation to the parent/parents are available in the therapist's report.
4. The referral problem directly relates to the problem of the disturbed relationship with the parent/parents.
5. Therapeutic material is parent-centred i.e., the material is predominantly concerned with the relationship with the parent/parents when compared to other extra-familial adult relationships.

The presence of three or more signs will be considered positive.

Atypical (repeated) older-age identification of H

1. Older-age is defined as the age when H is identified older than 35 years. Identifications, such as "he may be anywhere between 20-45 years" will be considered by the upper-age limit hence, the above example of age will be considered as

older-age identification.

2. Twelve such older-age identifications in both series combined, or six after the 10th exposure within one or both series.

B. "Prolonged-libidinal relationship with opposite-sex parent"
- "Atypical (repeated) H identification with opposite-sex"

Hypothesis 2: "Atypical (repeated) H identification with opposite-sex is positively related to the object-relations pattern of prolonged libidinal relationship with opposite-sex parent".

Assumption: Prolonged and existing libidinal attachment to opposite-sex parent will appear in the percept-genesis of H.

(Note: Libidinal attachment to opposite-sex parent would indicate the stage of object-relations in which the self is still attached to the parent-object, and has neither completely attained an identity of its own, nor found the "other" extra-familial objects for libidinal cathexis. It is essentially seeking the basic object with which it is largely identified. As we assume that H is the representation of self, it is expected that H must be predominantly perceived as of the opposite-sex i.e., of the opposite-sex parent, which the self is still seeking, and finds itself identified with).

Criteria

Prolonged libidinal relationship with opposite-sex parent

The disturbance in environmental object-relations refers to the incestuous and sexually provocative behaviour of the opposite-sex parent. Such behaviour is likely to intensify the libidinous feelings and prevent the ego from cathecting onto other objects. In view of the libidinal fixation it is likely that:

1. Physical separation from the opposite-sex parent does not take place at the age when children normally separate themselves from the parents to become involved in peer-group relations and self-initiated activities.
2. The opposite-sex parent continues to be the object of sexual feelings and phantasies even at the age when transference to other objects is normally the case.

Signs

1. Not married and still living with parent/parents.
2. Description of over-dependence and clinging behaviour beyond childhood (after 6 years of age) must be present in the therapist's report.
3. Description of incestuous and sexually-provocative family beyond childhood must be present in the therapist's report. Examples of incestuous and provocative situations are: opposite-sex parent bathing and washing the child beyond childhood, allowing the child to accompany the parent to bathroom or toilet, undressing and bathing in front of the child, sleeping together beyond childhood, etc.
4. Description of erotic feelings and/or masturbatory phantasies continued beyond childhood, must be available, in which the opposite-sex parent is clearly the sexual object of the phantasies.
5. Incident of actual incestuous act to have taken place in the individual's life.

Presence of two or more signs will be considered positive, with one exception; if an incident of an incestuous act is reported, that will be considered sufficient for the criteria.

Atypical (repeated) H identification with opposite-sex

1. Twelve opposite-sex identification in both series combined, or six after the 10th exposure, within one or both series combined.
2. Opposite-sex identification must be observed in both the series.
3. In the case of double-perception of H in which both the male and the female figures are perceived, it will be considered as opposite-sex identification.
4. If the subject says, "it could be a male or female, I can't say", that will not be considered as opposite-sex identification.

C. "Undifferentiation of self with objects" - "The double perception of H and/or S"

Hypothesis 3: "The double perception of H and/or S will be positively related to the object-relations pattern of the self, undifferentiated with the objects".

Assumption: The infantile and undifferentiated self-object relationship is manifested in the visual organization through the structures of double perception.

(Note: The assumptions described so far are related to the ego-object relationship continuum. In the present assumption, we are referring to the other end of the continuum i.e., the infantile stage of ego-object relations. In this continuum of ego-development, the infantile stage is at one end, and the mature dependence on the other. The first two DMT variables are supposed to elicit ego's relations with objects at the transitional stage. In the present assumption, the double perception indicates the most primitive stage of ego in which the attachment to objects is at the oral stage).

Criteria

Self as being undifferentiated from objects

Self as being undifferentiated from object, refers to the fixation of the ego at the infantile oral stage. The stage of adult or mature dependence corresponds to Abraham's "genital phase" (Fairbairn, 1966). The onset of the genital phase implies that "there will eventually be a union of the genitals in copulation" (Bellak, 1956, p. 19). At the pre-genital stage of object-relations such cathexis of other objects and the genital activity may not be expected. If the ego is not differentiated from the primary identification with the object, the genital act and true emotional relationship with either the homo or the heterosexual object may not have taken place. Of course, the individual may still be at the infantile stage, inspite of his manifest genital activity, but that would require an assessment of concern and love for the loved object. Such assessment is beyond the purview of the present investigation.

Signs

A clear statement by the therapist that the individual has never engaged in an emotional relationship eventuating in copulation

with the loved person.

Double perception of H and/or S

Perception of two figures in the stimulus area of H and/or S or, at least twice within one or both series.

D. "Lack of object-constancy" - "Repeated variation in H and/or S identification"

Hypothesis 4: "Repeated variations in H and/or S identification will be positively related to object-relations pattern of lack of object-constancy in the individual's life-situation during childhood and adolescence".

Assumption: The lack of object-constancy in the early life-history of the individual will appear in the percept-genesis of the figures as per the assumption of parallelism between the percept-genesis and the onto-genesis.

(Note: Lack of object-constancy refers to disruptions in parental care-giving behaviour offered to the child. These inconsistencies and disturbances will amount to discontinuities, instabilities, and changes in the internalized images of objects held by the individual).

Criteria

Lack of object-constancy

Lack of object-constancy refers to the disruptions of parental care-giving function due to parental loss or separation without its replacement by a "good" substitute. It also refers to the parents' inconsistent patterns of child rearing, identity reinforcement, and emotional relationship with the child, even though the physical continuity of parents may never have been disrupted. The effects of object inconstancy are most severe in the childhood. The lack of object constancy is evaluated only for the childhood period.

Signs

1. Death of parent/parents in childhood.
2. Separations in childhood. Both kinds of separations are included here: (a) child leaving home due to hospitalization or placement in an institution, etc. (Here, only the events occurring in childhood, are noted). (b) parent deserting or leaving home on account of divorce, separation, etc.

3. The individual was adopted during childhood.
4. History of parental psychiatric illness, or of some calamity which would interfere with parental function. However, a clear statement by the therapist should be available, which states that such an illness or the calamity interfered with the parental care-giving behaviour.
5. Descriptions of parent's severe emotional inconsistency must be present in the therapist's report. Parental severe emotional inconsistency is defined as behaviour of violence and cruelty alternating with over-indulgence and affection, or parental neglect and indifference alternating with over-protection and suffocation of the child with affection.

Presence of sign 1 to 3 with sign 4 or 5 will be considered positive.

Repeated variations in identification of H and/or S
variations in H:

1. More than 4 variations in age-identification of H within a series.
2. More than 4 variations in sex-identification of H within a series.

variations in S:

1. More than 4 variations in age-identification of S within a series.
2. More than 4 variations in sex-identification of S within a series.

General principles of counting variations:

1. It is considered to be a variation in age-identification, if the difference between the previous and the next identification is ± 10 or more years.
2. Variations in identification from correct to incorrect is considered positive. Stabilizations in identification is not considered a variation.

Example: in the case of male patients, the stimulus picture depicts two male figures. Consider the following sequences of identifications of one of the figure:

female, male, female = to be counted as 3 variations

female, male, male = to be counted as 0 variation

male, female, female = to be counted as 1 variation

3. A change from a correct identification to an uncertain or ambiguous identification is counted as a variation.

Example: male patient gives the following order of identification: male, male, ? = to be counted as 1 variation

4. The four variations have to be either for sex-identification or for age-identification alone, in relation to one figure.

For example, two variations in sex and two in age for a figure do not meet our criterion.

This condition is laid down to exclude the normal range of variation expected in any series.

E. "Disturbed and negative relationship with the same-sex parent"
 - "Atypical opposite-sex identification of S"

Hypothesis 5: "Atypical opposite-sex identification of S is positively related to the individual's disturbed and negative relationship with the same-sex parent".

Assumption: Since S is the representation of the same-sex parent object, the disturbed and negative relationship with the same-sex parent will affect the percept-genetic processes of stimulus-correct recognition of S.

(Note: S is considered the representation of the same-sex parent in the case when we expect that the ego has achieved initial developmental stages of separation and differentiation with the objects. In such a case, we are not expecting to get any signs of infantile ego-stages).

Criteria

Disturbed and negative relationship with the same-sex parent

The early frustrating aspects of parents are resolved by the individual's attainment of greater independence and increase of distance from them on account of his age-related activities and interests outside the family. The basis of a prolonged negative relationship may be internal apart from an objective basis e.g., prolonging on account of an unresolved oedipal conflict. If the relationship has been particularly disturbed and negative, there must be:

- (a) a basis of such negative relationship in the outer reality,
- (b) a persistent perception of the parent object as hostile and rejecting by means of projection and projective identification. Such perception will be evident in the phantasies and anxieties of the individual.

Signs

1. Reported incidences of same-sex parent exerting violence and cruelty towards the individual in childhood and/or later.
2. Description of repeated phantasies in childhood and/or later, of being attacked or injured by the same-sex parent, must be available in the therapist's report.
3. Description of repeated expressions of anxiety and fear of the same-sex parent must be available in the therapist's report.
4. Description of individual's open expressions of hostile and angry bouts of rage and tantrums towards the same-sex parent must be available in the therapist's report. Such expressions may have been witnessed during childhood and/or later.
5. Distinct expressions of dislike and hatred towards the same-sex parent must be available in the therapist's report.

Presence of any two signs will be considered positive.

Atypical opposite-sex identification of S

1. Twelve opposite-sex identifications of S in both series combined, or six after the 10th exposure within one or both series.
2. Uncertain identifications e.g., "could be male or female, don't know", are not to be counted as opposite-sex identification.
3. If two figures are perceived in the stimulus area of S and one of them is of the opposite-sex, that is to be counted as opposite-sex identification.

F. "A disastrous event with parent-object" - "S-dystonic percept"

Hypothesis 6: "S-dystonic percepts are positively related to some disastrous event or happening in reality with the parent".

Assumption: If in reality, a disastrous event has taken place with the parent-object which in result has become "damaged"

then the image of the "damaged object" will appear in the series as per the assumption of parallelism between the percept-genesis and the onto-genesis.

(Note: According to the object-relations theory, the objects may be perceived as "damaged" due to the aggressive cathexis of them in the process of internalization during infancy. The anxiety may be experienced by the object lest the object should be destroyed.

A disastrous event with the parent object witnessed by the child is likely to reactivate the image of the damaged object. If the difficulties arising over the object-relationships are still unresolved, such experience may result in the internal image of the object being permanently destroyed or damaged. Fairbairn (1966) referring to the phenomenon of repetition-compulsion states that "the fact is that he (the individual)1/ is haunted by them (i.e., the bad objects)1/; and since they are framed by the traumatic incident, he is haunted by this too" (p. 78).

Criteria

A disastrous event with the parent object

The experience of the parent object "suffering" in a traumatic situation is to be evaluated. This could be present in a concrete physically traumatic situation involving the parent during the individual's early life.

Signs

During childhood or adolescence some calamitous or disastrous event is reported in which the parent dies, or was seriously ill, hurt, or injured. Do not include natural death, as its impact is expected to be less dramatic. Though, parental suicide or an attempt at suicid should be considered a disastrous event with the parent.

S-dystonic percepts

(These responses are normally coded as 9:20 i.e., "projected intro-aggression" as per the DMT scheme).

It is considered to be S-dystonic percept when S is perceived as hurt, ill, injured, etc., or when S is perceived in severe pain, agony, state of misery, etc.

1/ the text in the bracket is by the present author.

DISTURBED SELF-ORGANIZATION

(the hypotheses and the criteria for the disturbed self-organization and the DMT variables)

(I) Traumatic Self-Experience

G. "Early experience of physical anxiety" - "H perceived in danger"

Hypothesis 7: "The perception of H in danger is positively related to the individual's experience of physical anxiety in early life-situation".

Assumption: An individual's self-experience of physical anxiety such as exposure to physical danger or violence in the early life-situation will appear in the percept-genesis of H, as per the assumption of parallelism between the percept-genesis and the onto-genesis. In terms of the object-relations, it is assumed that the bad persecutory objects and experiences in the outer reality may cause a persecutory anxiety continuously threatening the insecure ego. The threatened state of ego will be projected on the H in the DMT.

Criteria

Early experience of physical anxiety

The traumatic fearful experiences derived from the continually threatening and hostile object-relations in the outer reality are the major basis of physical anxiety which could turn into the persecutory anxiety mentioned above. Concrete evidence of threatening and hostile object-relations is the child's exposure to physical violence inflicted by the parents.

Sign

Description of experiences in early life, must be available, where it is found that the individual was subjected to continued physical danger or violence in the family situation. Examples of such experiences are: the child being subjected to continued child bashing, violent physical punishment, malicious intention to harm the child, etc. (Note: in the data analysis the early life is defined as the life period upto 12 years of age).

H in danger

(Here, we only consider the appearance of H in danger in the early exposures. The appearance of such responses in later part of the series may be more indicative of the defense mechanism of internalized aggression).

H is perceived in danger by the 10th exposure of the series. Some examples of danger are: "something terrible is going to happen to him (H)", "I feel that he (H) is in trouble", "the whole thing looks sinister to me", etc.

H. "Physical anxiety and aggressive response" - "H perceived threatening"

Hypothesis 8: "Perception of H as a threatening figure is positively related to the experience of physical anxiety in which the individual responds aggressively in self-defense".

Assumption: The early experience of physical threat or violence, which provokes a response in the individual to fight back against this life situation, will appear in the percept-genesis of H. It is based on the assumption of parallelism between percept-genesis and onto-genesis.

(Note: I. In these assumptions, we have relied on the relationship between experience and perception. However, the defenses originate in response to an experience. The reasoning behind this is simple: in response to being attacked, the individual behaves like a fighter. If this becomes a pattern of life, and is enacted even in a situation where it is not required, it is then called a mechanism of identification with the aggressor.

II. The physical situation of danger and violence is the same as hypothesized in the "early experience of physical anxiety". However, it is discriminated from the above for its inclusion of a particular type of "response", which is of fighting back in self-defense against the torturous life-situation. Some people fight back and some do not. In terms of object-relations, the image of persecutory objects haunt the ego, which in turn can escape from the bad objects or "fight" (Bion, 1962) them).

We assume that a threatening H will appear in the percept-genesis of individuals who responded to the persecutory objects by fighting rather than fleeing.

Criteria

Physical anxiety and aggressive response

Signs

Descriptions of the situation in which the individual during early life was subjected to physical threat and violence must be available in the therapist's report. Further, more descriptions of the individual's attempts to fight back the situation by way of protestations, retaliation, etc., must also be included.

H perceived threatening

H is perceived in a militant, fighting position, and/or threatening the secondary figure or anywhere else in the stimulus field.

(Note: It included both the 5:10 and 5:20 i.e., "identification with the aggressor" as per the DMT scheme).

(II) The Disturbed Self-Experience

I. "Narcissistic self-image" - "Positive feeling expressed towards H"

Hypothesis 9: "Positive feeling expressed towards H is, without doubt related to the narcissistic image held by the individual of himself".

Assumption: Assuming that H is the representation of the self, the libidinal cathexis to the self-image will appear in the percept-genesis of H.

Criteria

Narcissistic self-image

Narcissistic self-image is a product of excessive libido cathexis of the ego into itself. It is based on the proportion of the cathexis of the libidinal ego and the aggressive ego. At times, due to difficulties in the object-relations, the ego withdraws from the objects and cathects increasingly into itself. "It may be carried to a point at which all emotional and physical contacts with other persons are renounced, and it may go so far that, the libidinal links with outer reality are surrendered..." (Fairbairn 1966, p. 50). This condition is

usually referred to as the pathological narcissism. The narcissistic self-image could be inferred from clinical evidence of excessive libidinal cathexis of the ego and pathological narcissism.

Signs

1. Evidence of excessive libidinal cathexis of the ego:

Descriptions such as an individual's "self-love, "self-opinionated over-confidence", unrealistic self-image", "over-valuation of the self", and the like, are available in the therapist's report.

2. Evidence of pathological narcissism:

The therapist's clear statement that the psychodynamical basis of the individual's problem is due to a "narcissistic personality" or a "narcissistic disorder" condition.^{1/}

Presence of one of the signs will be considered positive.

Positive feelings expressed towards H

At least two expressions, within one or both series, of a positive feeling or of an admirable quality of H e.g., "he looks nice and gentle", "she looks pleasant and interesting", "she has such a lovely face", "a young person in his prime and vitality", "a pretty boy", "a nice woman with nice hair", "he looks impressive, a model of masculinity", "that girl is lovely and beautiful", etc.

J. "Negative self-image" - "Negative feeling expressed towards H"

Hypothesis 10: "The negative feeling expressed towards H is positively related to the individual's negative self-image".

Assumption: Assuming that H is the representation of self, the negative cathexis of the self-image will appear in the perceptogenesis of H.

Criteria

Negative self-image

Libidinal ego is the basis of positive self-love. Over this,

1/ At the time of the planning of the study, "narcissistic disorder" was referred to in the classical sense of the term. Currently the usage of the term is much more general and diluted (see Kohut, 1971).

a persecutory ego function develops i.e., the aggressive ego. Through these means, the ego "directs its energies to hating its infantile weakness", which is intensified by parental intolerance of the child's weakness, as a result of which "a self-frustrating situation of deep internal hate arises" (Guntrip 1969, p. 188). When it reaches the pathological degree, Guntrip (1969) continues: "the central ego may be all but captured by the anti-libidinal ego. In these patients hostile self-attack and punishing self-mastery are quite visible"(p.189).

Signs

1. Expressions of self-hate:

Descriptions from early life as well as from the present of the individual's "self-hatred", "self-dislike", attempts to "belittle self", "tendency for self-accusation", "self-denigration", etc., are present in the therapist's report.

2. Behaviour of hostile self-attack:

Suicidal attempts or recurrent suicidal ideas.

Presence of one sign will be considered positive.

Negative feelings expressed towards H

At least two expressions, within one or both series, of a negative feeling or of a depreciatory quality of H, examples of which are: "it is most annoying the way he just sits there and looks", "this woman is such a nuisance with her food and plate", "she looks like quite a flighty and superficial girl", "there, somebody sitting down with an ugly expression on his face", "he is beginning to look spooky on that table", etc.

K. "Labile self-image" - "Size-change percepts"

Hypothesis 11: "The size-change percepts are positively related to the labile self-image (more specifically, the self-esteem) of the individual".

Assumption: The process of narcissistic cathexis-decathexis of the self-image will appear in the percept-genesis of the contours and sizes of the images.

(Note: According to Kragh (1955), the size increase manifests over-valuation i.e., narcissistic cathexis, of self. We reasoned that if the size-increase manifests the

cathexis of the self, then the size-decrease must be the manifestation of the decathexis of the self. According to our assumption, the recurrence of size-change percepts would indicate a general pattern of lability of the self-image i.e., cathexis-decathexis-cathexis, thus forming a kind of cycle).

Criteria

Labile self-image

The ability to maintain and defend the self-esteem from internal discomfitures and external vicissitudes is seen in persons with satisfactory personal equilibrium. In psychiatrically disturbed patients, such personal equilibrium is relatively impaired. The capacity to maintain a stable self-image or self-esteem can be impaired due to the consequences of the environmental object-relations, the proportion of libidinal and aggressive ego-cathexis, and the presence of certain psychopathological states e.g., the manic-depressive cycle. For the present evaluation, the susceptibility to external environmental factors e.g., success and failure, appraisal by others, etc., has to be excluded as it would require ongoing observations. The remaining two factors can be inferred from the following signs:

Signs

1. Susceptibility to cyclic condition:

In clinical description, the condition of cyclic mood changes i.e., both "high" and "low" phases of the cycle should be present. The rationale for the above sign, derives from the fact, that an individual's self-esteem changes drastically from one cyclic phase to another.

2. Susceptibility to other causes:

A clear statement by the therapist should be available about the patient's sudden and numerous shifts from one extreme of diffidence, inadequacy, and worthlessness to another extreme of over-confidence, adequacy, and competence, vice-versa.

Presence of one sign will be considered positive.

Size-change percepts

Perception of at least two changes in size (increase or decrease) of either the figure, figure-parts, or of H object or external object, within one or both series. If the change in size appears more stimulus-adequate than the previous one, it should not be considered a size-change percept.

(III) Status of Ego-functioning

L. "Ego-weakness" - "Atypical (repeated) younger-age identification of H"

Hypothesis 12: "H atypical (repeated) younger-age identification is positively related to the state of the "ego-weakness" of the individual".

Assumption: The ego-identity of an individual with "ego-weakness" is still that of a weak and dependent child. Therefore, the identification process of H, as an adult figure, may be affected and it may be perceived as a child figure.

(Note: From an object-relations point of view, ego-weakness is classified as an arrest of the growth of the ego. According to Guntrip (1969), "the feeling of weakness arises out of a lack of a reliable feeling of one's own reality and identity as an ego" (p. 176), and "in seeking to overcome his weakness, the child employs a method which ensures its perpetuation, creating an endopsychic situation in which natural development is impossible" (p. 184). It is assumed that an individual with ego-weakness, due to basic fear and diffidence, will find it difficult to accept the role and identity normally associated with adulthood).

Criteria

Ego-weakness

The responsibilities associated with an adult role are love and work. The most concrete manifestation of assuming work and love responsibilities would be "gainful employment" and a "heterosexual relationship with emotional involvement".

Signs

1. A report should be available that the individual was not gainfully employed within the past year.
2. No report of hetero-sexual genital act.

Presence of one sign will be considered positive.

Atypical (repeated) younger-age identification of H

1. Twelve identifications in both series combined, or six after the 10th exposure, within one or both series, in which H is identified 10 years or younger.
2. If the patient only says: "a young boy" or "a young girl" and cannot identify the age more specifically, than that shall not be counted as younger-age identification.

(IV) Defenses

M. "Characteristic defenses in therapy and life-situation" -

"Defense signs"

Hypothesis 13: "The dominant defense signs are positively related to the characteristic defenses employed by the individual in therapy and life-situation".

Assumption: as stated by Smith & Kragh (1970) and Kragh (1970).

(Note: The defense signs are coded as per the DMT scheme. The criteria for dominance are determined by the investigator and are described in the defense signs criteria).

Criteria

Characteristic defenses in therapy and life-situation

Signs: identification, by the therapist, of the individual's characteristic defense mechanisms employed in therapy and life-situation.

Defense signs

Only the following signs were included for the analysis:

Repression, Isolation, Denial, Reaction Formation, Identification With Aggressor, Turning Against Self, Projection, Regression.

(Note: The two signs: "Identification with the Opposite-Sex" and "Polymorphous Identification" were excluded for the reasons mentioned in the "Analysis Scheme for the DMT Measures").

All variants of a sign are totalled. The criteria for "dominance" are assigned on the basis of the scores. The "dominance" is determined by the following steps:

1. The number of sign variants, for both series, for each of

the defenses is to be noted.

2. The mean for each defense for the whole sample is to be computed.
3. The scores for each individual's defenses are to be assigned on the basis of the quantitative value, the correspondence of a defense in the series, and the late-phase appearance of a defense, as per the following values:

below mean = 0

above mean = 1

no correspondence of the sign = 0

correspondence of the sign = 1

no late-phase appearance = 0

late-phase appearance = 1

maximum score = 3

If the score is 1 or 0 = the sign is considered "non-dominant".

If the score is 2 or 3 = the sign is considered "dominant".

(V) Psychopathological Manifestations

N. "Depressive condition" - "Darkness percepts"

Hypothesis 14: "The darkness percepts are positively related to the individual's depressive condition".

Assumption: The depressive condition will contribute to the formation of dark structures in the visual organization.

(Note: The assumption for the relationship between darkness depression, does not belong to the percept-genetic theoretical frame-work. However, it is based on the observation of conventional projective techniques such as, the Rorschach, and the Object-Relations Technique. The shading and blackness is usually associated with anxiety and depression. In the DMT coding scheme, if the darkness covers the face or part of the figure, it is coded as a variant of the sign turning against self, and coded as 6:20 (intro-aggression). We are taking the darkness percept as such, whether it masks the figure, part of the figure or the background, is not taken into consideration. We investigate if the perception of darkness is related to the psychopathological condition of depression. This investigation was motivated by the universal phenomenon of the association between blackness or darkness with grief and depression. "The depres-

sed see the world darker", is a saying which has its equivalent in many a culture (a case in point).

Criteria

Depressive condition

The diagnosis of "depression" is determined by two independent raters.

Darkness percepts

At least two responses with the perception of darkness, shadows, or blackness, after P_1 , within one or both series. The darkness, shadows, or blackness could be perceived in any part of the stimulus field, such as the whole or part of the background, body or body parts of the figures. The qualifying descriptions of the stimulus attributes e.g., "dark face", "dark hair", "dark stripes", etc., are not considered as darkness percepts.

0. "Obsessive condition" - "Detailistic percepts"

Hypothesis 15: "The detailistic percepts are positively related to the individual's obsessive condition".

Assumption: The obsessive condition will contribute to the emphasis on minute details, in the reconstruction of the percepts.

(Note: The assumption for the relationship between the detailistic percepts and the obsessive condition does not belong to the percept-genetic theoretical framework. It is primarily based on an observation of conventional projective technique, such as Rorschach and on symptomatological characteristics of the obsessive condition. The detailistic percepts bear resemblance to the responses of Rorschach to small details (i.e., of "d" location). The emphasis on details bears resemblance to the obsessional characteristic of meticulousness).

Criteria

Obsessive condition

Obsessive-compulsive or Anankastic Personality Disorder, is diagnosed by the two independent raters.

Detailistic percepts

1. Perception of minute details, in relation to the figures, and their body parts, or H object. Examples of such minute details are: "his tie had diagonal lines", "I could see the lines on his neck", "two white hairs standing above his ears"

"I see more lines on the top part of the instrument", "the eyebrows had a longish look", "buttons of the sweater are showing", "she has dark eyebrows and dark lipstick", etc.

2. Whether the detail is correct or not is immaterial for the fulfilment of the criterion.

Identification of the Patients Representing the Personality Variables

A trained psychoanalyst was approached to act as a co-judge to identify the patients who fulfilled the signs criteria for the various personality variables.

Procedure

1. The criteria and a list of the signs was given to the co-judge so he could examine the signs for clarity and preciseness. Some signs needed redefining as they were lacking in clarity, and required undue inference on the part of the co-judge. In view of the co-judge's suggestion, the signs were further specified and concretized. The modifications are incorporated in the list of the signs presented earlier.
2. On finalization of the signs, the judge was asked to identify the patients, on the basis of the complete interview data, who represented the various personality variables. The interview analysis schema were provided to assist him in classifying the interview data for the relevant personality variables.
3. The co-judge classified the patients for each of the 15 personality variables in the dichotomous category, as per the "presence" of the variable (+) and "absence" of variables (-). The investigator classified the patients in the dichotomous category independently.

Analysis of inter-correlation between the investigator's and co-judge's classification

The investigator's classification of the patients was tabulated against that of the co-judge in following the fourfold table:

		Investigator	
		+	-
co-judge	+		
	-		

Three variables, viz. the characteristic defenses in therapy and outside life, the diagnosis of the depressive condition, and the diagnosis of the obsessive condition, were excluded from the analysis of the inter-correlation. The three categories were already determined by external evaluators. Their inclusion would have served no purpose, for had we included them for the analysis, it would have artificially increased the inter-judges agreement. The inter-correlation for the remaining 12 categories was computed by the G-index of agreement (Holley & Guilford, 1964):

$$G = \frac{2(a + d)}{N} - I$$

The fourfold table of agreement for the 12 variables is presented below:

		Investigator	
		+	-
co-judge	+	70	19
	-	16	219

$$G\text{-index} = .79$$

The G-index of .79 indicates satisfactory agreement between the two judges over the identification of the personality variables.

Areas of disagreement

Variable 1 - sign 3: one disagreement, as sufficient information was not available to identify the therapeutic material as parent-centered.

Variable 2 - sign 2: two disagreements, as sufficient information was not available about overdependence and clinging behaviour.

- Variable 3 - disagreement in all three cases. The co-judge did not agree that the therapist's statement about absence of genital act with heterosexual objects tallied with other statements which indicated that the individual's self is differentiated with the primary objects. According to the co-judge, the absence of the genital act was indicative of narcissistic fear of objects.
- Variable 4 - sign 2: disagreement in two cases. The therapist's statements did not sufficiently show that the individual's separation during childhood amounted to serious disruption of parental care and contact.
- Variable 5 - sign 2: disagreement in two cases. The therapist's statements did not sufficiently indicate that expressions of hostile and negative feelings were above that normally occurring during childhood. Similarly, in the case of sign 4, the judge could not ascertain, in two cases, if the expressions of anxiety and fear in childhood were severer than those usually appearing at that age.
- Variable 7 - disagreement in four cases. Some experiences in other patients were considered indicative of physical danger and violence, by the co-judge. The investigator had not considered them to be of any great impact.
- Variable 8 - disagreement in one case as the information was overlooked in the interview material.
- Variable 9 - disagreement in three cases. The interview material in three other cases indicated narcissistic self-image.
- Variable 10- disagreement in four cases. The interview material in four other cases indicated negative self-image.
- Variable 11- sign 1: disagreement in one case. The material did not sufficiently indicate the presence of high and low moods. In addition to this, the co-judge identified two more cases with labile self-image.
- Variable 12- sign 2: disagreement in three cases. This is the same sign which was included in variable 3 in which the co-judge disagreed, with respect to the same patients.

In summing up the areas of disagreement, they were generally due to a lack of definite information from the interview material. However, it also indicated the need for arriving at a stricter definition of the signs on which the disagreement was registered.

After the analysis of the items of disagreement, the list of patients representing the personality variables was corrected in agreement with the co-judge. Variable 3, which was defined as the self undifferentiated from the objects, was dropped. Instead, a common definition was mutually arrived at. The three patients were identified with "narcissistic fear of objects and no history of close heterosexual relationship". In further analysis, variable 3 would be referred according to the mutually evolved definition.

Identification of the Patients Representing the DMT Variables

The DMT variables, with the exception of the defense signs, were either modified or new. It was decided to test the reliability of the criteria and of the investigator's scoring for the new and the modified variables, viz. variables 1-12 and 14-15.

An experienced DMT evaluator was approached to act as co-judge to identify patients who fulfilled the criteria for the above mentioned variables. The DMT variables, as the personality variables, demanded classification in the dichotomous category. Therefore, the same procedure as stated in the identification of the patients for the personality variables was adopted for the co-judge's evaluation and for the statistical analysis of the inter-judges agreement.

The total agreements and disagreements were as follow:

		Investigator	
		+	-
co-judge	+	96	6
	-	10	266

$$G\text{-index} = .92$$

The G-index of .92 indicates satisfactory agreement between

the two judges on identification of the DMT variables. One of the reasons for the high agreement was, that six variables out of fourteen consisted of figural identification for sex and age, and did not permit any chance for disagreement, except for attentional errors.

The areas of disagreement

The areas of disagreement are discussed in order to draw attention to the signs which can be improved further for achieving complete agreement. In the present investigation, most of the criteria are determined on the basis of the presence of one or two responses of a kind. Though some responses from the same individual were considered doubtful, his other responses were definite and decisive.

Variable 7 - one disagreement. It was doubtful if the response definitely suggested that H was in "danger".

Variable 8 - two disagreements. It was doubtful if the responses suggested definitely a threatening behaviour by H.

Variable 9 and 10 - two disagreements, due to the inability to decide whether a quality attributed to H was in fact positive, negative or neutral, for a particular individual. Such judgement would require knowledge of the individual's attitudes to such qualities. It was partly a semantical and transcultural problem. Some words have a particularly positive or negative emotional loading within a particular culture.

A person not very familiar with that culture may be unaware of such cultural-linguistic nuances.

Variable 14 - three disagreements. Some darkness percepts were considered to be merely qualifying the stimulus attributes, which was not indicative of a perception of darkness.

Variable 15 - two disagreements. Some responses were considered as usually perceived details and therefore not minute enough to be coded as detailistic percepts.

After the analysis of the items of disagreement, a list of the patients representing the various DMT variables was corrected

in agreement with the co-judge.

RESULTS

The relationship between the two sets of variables is examined. The Fisher's exact probability test (one tailed 2X2 tables) is applied for all hypotheses to test the difference between the groups, with or without the DMT variable, against the criterion which is i.e., presence or absence of the personality variable.

The .05 level of probability will be considered significant.

Table 7

Comparison of DMT Groups on Personality Variables

DMT		Personality Variables	
		+	-
Hypothesis 1	Group 1	4	7
	Group 2	2	14
		P = .1603 (NS)	
Hypothesis 2	Group 1	5	1
	Group 2	3	18
		P = .0037 (xx)	
Hypothesis 3	Group 1	2	1
	Group 2	1	23
		P = .0250 (x)	
Hypothesis 4	Group 1	2	1
	Group 2	5	19
		P = .1555 (NS)	
Hypothesis 5	Group 1	7	5
	Group 2	8	7
		P = .5521 (NS)	
Hypothesis 6	Group 1	3	2
	Group 2	6	16
		P = .1888 (NS)	
Hypothesis 7	Group 1	4	4
	Group 2	0	19
		P = .004 (xx)	
Hypothesis 8	Group 1	3	2
	Group 2	1	21
		P = .0128 (xx)	

1/ Group 1 with the DMT variable, group 2 without the DMT variable. Personality variable criterion: Presence (+) and Absence (-). x = .05, xx = .01, and xxx = .001 -levels of significance

Table 7 - Continued

DMT		Personality Variables	
		+	-
Hypothesis 9	Group 1	5	4
	Group 2	3	15
		P = .0523 (NS)	
Hypothesis 10	Group 1	6	11
	Group 2	0	10
		P = .042 (x)	
Hypothesis 11	Group 1	6	3
	Group 2	4	14
		P = .0341 (x)	
Hypothesis 12	Group 1	1	4
	Group 2	4	18
		P = .6738 (NS)	
Hypothesis 13 (I)	Group 1	3	3
	Group 2	9	12
		P = .5570 (NS)	
(II)	Group 1	7	2
	Group 2	8	10
		P = .1081 (NS)	
(III)	Group 1	4	1
	Group 2	12	10
		P = .3020 (NS)	
(IV)	Group 1	6	7
	Group 2	2	12
		P = .0817 (NS)	
(V) ^{1/}			
(VI)	Group 1	7	3
	Group 2	3	14
		P = .010 (xx)	
(VII)	Group 1	9	2
	Group 2	4	12
		P = .0053 (xx)	
(VIII)	Group 1	4	3
	Group 2	2	18
		P = .024 (x)	
Hypothesis 14	Group 1	9	4
	Group 2	1	13
		P = .0012 (xxx)	

1/ (V) i.e., "identification with the aggressor" sign had to be dropped from the analysis since no therapist identified it as a characteristic defense in his patient.

Table 7 - Continued

DMT		Personality Variables	
		+	-
Hypothesis 15	Group 1	6	1
	Group 2	3	17
		P = .002 (xx)	

We now know that the groups formed, with or without the DMT variables differed significantly with regard to the personality variables. We can now state with confidence, that some statistical relationship exists between these variables. However, we do not know whether any predictive association exists between them. The tests of significance do not provide such information. For that, we specifically need to test the predictive association of the variables.

To test the predictive strength of the DMT variables for the significantly related personality variables, Goodman and Kruskal's "index of predictive association" i.e., lambda (Hays 1973, pp. 745-749) was computed. The index measures the predictive strength between the two sets of information. If the index is zero, one can say that there is no predictive association. On the other hand, if the index is 1.00, it means that there is a complete predictive association and perfect prediction is possible. However, Hays (1973) stresses that an index of zero does not necessarily mean that there is no relationship between the two sets of information, but on the other hand it is not such that given information "A" one could predict about "B".

Such a measure of prediction forms a good adjunct to a test of significance and must be used if one is interested in actual predictive strengths of the test variables.

Table 8

Hypothesis	Exact P=	Lambda indices=
1	NS	
2	.0037	.5
3	.0250	.33
4	NS	
5	NS	
6	NS	
7	.004	0.0
8	.0128	.25
9	NS ^{1/}	
10	.042	0.0
11	.0341	.3
12	NS	
13: (I)	NS	
(II)	NS	
(III)	NS	
(IV)	NS	
(V)	-	
(VI)	.010	.4
(VII)	.0053	.54
(VIII)	.024	.167
14	.0012	.5
15	.002	.556

The lambda indices show (except for hypothesis 7 and 10) that the relationship between the two sets of statistically related variables is not only significant on a test of significance, but is also a predictive association.

DISCUSSION

The groups formed on the basis of the presence and absence of the DMT variables significantly differed on some of the personality variables.

The predictive validity may be considered as established for the following:

-
- 1/ Given the exact probability of .0523, hypothesis 9 failed to reach our criterion for the acceptance of H1. However, the lambda index for the variables in hypothesis 9 is: .125.

DMT Variables

1. Atypical opposite-sex identification of H
2. Double percepts
3. H perceived threatening
4. Size-change percepts
5. Defense signs:
 - a) Turning against self sign
 - b) Projection sign
 - c) Regression sign
6. Darkness percepts
7. Detailistic percepts

Personality Variables

- Prolonged libidinal relationship with the opposite-sex parent
- Narcissistic fear of objects and no history of a close heterosexual relationship
- Physical anxiety and aggressive response
- Labile self-image
- Turning against self defense
- Projection defense
- Regression defense
- Depressive condition
- Obsessive condition

Although there exists a statistical relationship between the variables, mentioned below, the predictive association is not shown by the lambda indices:

- | | | |
|---|---|--------------------------------------|
| 1. H perceived in danger | - | Early experience of physical anxiety |
| 2. Negative feeling expressed towards H | - | Negative self-image |

The DMT variables appear to be particularly significant for predicting aspects of the disturbed self-organization, viz. traumatic self-experience, disturbed self-image and some aspects of pertaining to the status of the ego functioning. Out of the six variables concerning the disturbed environmental object-relations, only the atypical opposite-sex identification of H appears to have a significant predictive value. However, disturbed aspects of self-organization are a product of disturbed object-relations. The first four significant DMT variables suggest the nature of the suspected disturbance in the object-relations.

In the first four significant DMT variables, the percept-genesis of H appears as the prominent factor. The last two, namely

the double-percepts and the size-change percepts, refer to the percept-genesis of both figures, but to a large extent, they refer to the percept-genesis of H. The variables pertaining to the percept-genesis of S, viz. opposite-sex identification of S and the S-dystonic percepts, did not appear significant for predicting the disturbed environmental object-relations.

The variable which predicted the traumatic self-experience suggests temporal relationship between the onto-genesis and the percept-genesis. The traumatic experiences of early life appeared in the early stages of perceptual development.

A few comments are made in relation to each of the significant variables:

Opposite-sex identification of H

In the first few exposures both the male and the female subjects are likely to identify H as female. Kragh (1955) related this phenomenon to the predominance of the mother image in the first few years of life. However, in the later exposures we expect a greater tendency for correct sex identification of H. Further, in the case of atypical sex identification of H, the subject tends to identify H of the opposite sex as his own self is still attached to the excessively libidinized and exciting object, and he has not attained a separate identity of its own.

Double percepts

Kragh (1959), too, observed the double percepts which he termed as hero duplication. Kragh suggested that the second figure might be conceived of in terms of a "supporting ego".

In our sample, double percepts are observed only in three cases. While all three perceived the double figures in the stimulus area of H, one also perceived double figures in the stimulus area of S. Since both the DMT and the personality variable in question were a rare occurrence, the evidence could only be considered as preliminary. However, if we examine the preliminary evidence, an interesting paradox appears in the double percepts phenomenon. The therapist's report suggest that these subjects never engaged in a close heterosexual relationship out of

fear, nonetheless they perceive two figures, often a male and a female, where normally only one is perceived. Does this mean that the ego still cannot separate from the basic object? or, that the sexual object is still possessed by the other parent and the Oedipal anxiety concerning punishment causes fear and avoidance of the heterosexual object in the life situation?

From a closer look at the clinical material, we speculate that the double figure percept (if one figure is male and another female) may well be associated with the schizoid phenomenon characterized by extreme degree of narcissism and withdrawal from the object. The schizoid person who is frustrated and deprived by the object internalizes it. When he feels that he has got hold of it, he tries to retain it within himself, by withdrawing from the physical world. In fact, he is afraid of another narcissistic trauma. According to Guntrip (1969, pp. 17-48) withdrawness, narcissism, loss of affect, loneliness, etc., are prominent in the schizoid personality as the schizoid withdraws from the objects due to his fear of loss of early internalized object. But the object still remains desired and needed. The "needed object" from whom the schizoid withdraws" (Guntrip 1969, p. 27), remains at the centre of the psyche, and is consequently perceived along with the projected ego.

H perceived threatening

A predictive association is observed between the H perceived threatening and the self-experience of physical anxiety and aggressive response in early life situation. Although the H perceived in danger is statistically related to the early experience of physical anxiety, the relationship is not such on the basis of which a reliable prediction could be made.

Both variables are related to the experience of physical anxiety generated by the object-relations which made the individual as a child feel helpless. In the case of the H perceived threatening he is reported to have made an aggressive response in self-defence. The physical anxiety has both the external and the internal components described in psychoanalytic psychology.

The excitations caused by such traumatic anxiety "may have their source in the outside world or within the organism (Sjöbäck, 1973, p. 37). The danger of castration, loss of support of the object, physical violence against which the individual may have felt helpless are inferred from the clinical data which appear to have a basis in the environmental object-relations and to some extent in the internal developments. This lends support to the view discussed earlier that certain types of content in the DMT may be profitably analysed for self-experience independent of the evaluation of the defenses because the unresolved traumatic experiences may be tied rigidly to the self-representation. From the point of view of therapeutic effectiveness, the therapist is likely to make use of such observations acquired from the DMT. Some therapists prefer to interpret the experiences and then the defense which is employed against the feared experience (Malan, 1976).

The therapeutic technique is based on the rationale that if the experience, which the individual is defending against, is interpreted first and brought to the conscious, the defense loses its purpose and therefore is likely to be more amenable to modification. On the other hand, if the defense is therapeutically "attacked" without the feared experience being first resolved, the resistance may be greater to such modification. At times, the DMT may provide an opportunity to analyse the defense in the context of the disturbing experience which can be exploited for a therapeutic interpretation.

The variables also lend support to the assumption of percept-genetic theory regarding the temporal correspondence between the onto-genesis and the percept-genesis ("the micro-macro parallelism"). The traumatic experiences of early life appeared in the early stages of perceptual development. To recall, in this investigation, the first 10 exposures were considered as "early stages of perception" and the experiences upto 12th year of life as the "early life experiences". The correspondence between the two roughly suggests some "order" between the micro-process of perception and macro-process of life in the early P-phases.

Negative feelings expressed towards H

Although the negative feeling expressed towards H is statistically related to the negative self-image, the relationship is not such on the basis of which a reliable prediction could be made. Its counterpart i.e., the positive feeling expressed towards H just failed to reach the level of significance (P is .0523). However, it could be considered as showing a marginal statistical relationship with the personality variable of the positive self-image. The value of the lambda index is computed as .125 which indicates a predictive association between the two variables.

Putting all the facts together, it appears that the expression of the positive and the negative feeling towards H are somewhat related with the positive and negative self-image respectively. At times overt expressions of happiness or annoyance accompanied the verbal expressions. The libidinal and the aggressive cathexis of the ego may be inferred from the overt positive or negative verbal expressions, which are directed towards H. Their correspondence with the self-image and with the patients' behaviour towards their own self - self-admiration, self-hate, self-attack, etc. - lend support to the general assumption that H is the representation of the self. Feelings similar to the ones that the individual has towards his own self are projected on the representation of the self i.e., the H.

Size-change percepts

Three fourths of the time, the size changes perceived by the same subject were increases as well as decreases in the sizes of the figures and objects. This pendulum like swing may be analogous with the cathexis and decathexis of the ego. All size-change perceivers (except one) perceived size changes in both figures and often in H object and in the external object, as well these size-change percepts are consistent with the concept of self-esteem. The self-esteem depends on the relative valuation of the self and the others. The constant fluctuation in the relative valuation of both would represent fluctuations in self-esteem.

Defense signs

The validation of defense signs, to some extent, depends on the therapists' current patterns of identification of defenses, their relative importance according to the therapists, the theoretical orientation regarding the defensive structure of the personality and the psychopathological disorder, as well as on the inherent limitations of the sign codings. To illustrate, identification with the aggressor was not identified by any therapist. While denial was the most frequently identified defense by the therapists (in 16 out of 27 cases), this sign was determined as dominant sign in only 5 cases in the DMT. Responses which can be coded as denial do not appear very frequently in the present protocols. As an alternative, the primary defenses i.e., repression and denial, may be assigned extra credits if the subject fails to reach the T-phase or if an unpleasant or discomforting percept of any intensity (i.e., the D-phase) is totally prevented from appearing in the conscious. Such extra credits for repression and denial in absence of C-phase, T-phase, D-phase, etc., may be investigated in the future for their validity against the therapists' evaluation of the same defenses.

It may be noted that in this investigation the defensive organization was not analysed for its relationship with the psychopathological categories e.g., analysis of the prominence of isolation sign in case of obsessive patients. One can evaluate the construct validity of the signs by examining whether the prominent signs in patients of a particular psychopathological category tally with the psychoanalytic assumptions regarding the defensive organization. This has already been tried with regard to DMT and MCT (see Introduction) and may be considered as alternatives to offset the therapist-introduced bias in identification of the defense mechanisms. However, as per investigator's method of evaluation of the dominant signs, turning against self, projection, and regression are observed to have a predictive value.

Darkness percepts

In the DMT, the sides are black and white, and as the light goes off one may feel that whole picture is going into darkness, especially in the first few exposures, but it does not explain the partial darkness and the perception of darkness in the later phases. The darkness was generally perceived in the earlier, as well as the later exposures in the identified cases. Note that in the DMT conventional scoring, the darkness is coded only if it covers or masks the body or body parts of H (coded as 6x20). The darkness percepts in this investigation included those and other kinds, as was elaborated in the criteria.

In the DMT, the darkness is related to introaggression. Our findings to some extent are related to the DMT assumption regarding the perception of darkness. From the object-relations point of view, depression is associated with introaggression. The aggression felt earlier towards the object is turned upon self, hence, the experience of depression and guilt. The depression is guilt-burdened because, basically, the aggression is directed towards the object and is turned inward, primarily to defend the object against one's own badness. The feeling of guilt results from aggression which is primarily directed towards the object. Guntrip (1969) says: "it is an attack on a hostile, rejecting, actively refusing, bad object. It leads to depression for it rouses the fear....a fear that grows into guilt" (p. 24). He also assumes that the aggression is turned against the self, "the depressed person turns his anger and aggression back against himself and feels guilty" (Guntrip 1969, p. 25).

The perception of darkness in reference to H may be a transformation of the feeling of depression resulting from the guilt and one's own badness. The darkness is perceived frequently in the background and the surroundings which may be the perceptual representation of the perceiver's "world". Besides, the depressives perceived "shadows", "black dresses", "shrouds", and the like in relation to the DMT figures which are culturally associated with death and mourning. We speculate that these percepts are determined by aggression which is directed against the object and

the self.

Detailistic percepts

The perception of minute details indicate the obsessive's keenness for details both in the perception, as well as in the reporting. Minute details are perceived at the cost of major structures. For instance, three patients perceived minute details of H object but they hardly perceived the figures or the emotional expression belonging to S. In fact, out of the seven patients who reported the detailistic percepts, only one correctly identified both figures and the threat expression on the face of S.

The relative inability of a compulsive person to reconstruct facial emotional configurations, according to Kragh (1955), may be related to absence of "inner structures" of faces in them. Does the absence of inner structures result from an obsessive-compulsive's problem concerning the internalization of the objects? From the object-relations point of view, this compulsive attention to the minute details and the exclusion of the whole figure characterizes the obsessional conflict over expulsion and retention of the object. We refer to the conflict during the transitional period during which the ego employs the obsessional as well as other techniques to deal with the object-related anxieties. The obsessive's conflict is whether the object should be expelled or retained. Fairbairn (1966) states that "such anxieties are obsessional anxieties, and it is the conflict between an urge to expel the object as contents and an urge to retain the object as contents that underlies the obsessional state" (p. 44).

The pattern similar to the above is observed in the DMT responses. By grasping the detail and excluding the other "contents", an obsessive patient retains some contents and excludes the remaining of the object.

To conclude, some DMT variables, viz. those concerning the percept-genesis of the figures and particularly of H, the defense signs, the size-change, darkness, and detailistic percepts appear to correspond with the personality variables concerning the disturbed aspects of the self-organization and the object-relations.

As the probability of their occurrence with the personality variables is significant, the predictions on the basis of the DMT variables could be made for the presence of the related personality variables. The application of the DMT in the clinical setting may be particularly useful in planning an initial psychotherapeutic focus. If the psychotherapeutic techniques consists of interpreting the feared and avoided experience of object-relations, either along with or prior to the interpretation of the defenses which are presumably employed against the experience, the DMT is likely to provide the initial material for such a therapeutic strategy.

Q-FACTOR ANALYSIS

The responses of the 27 patients on the DMT were coded for 78 variables consisting of the Perceptual Achievement, the Defense Signs, and the Content Analysis (see Appendix). The 78 variables coded as 0 or 1 for the presence or the absence of the criteria, were fed in the computer for each patient.

The data was analysed by the Lund University Univac computer for D(W) index program analysis.

D(W) index program analysis

The results of a Q-factor analysis is the grouping of persons, not tests, a fact that creates problems, when we want to identify and interpret the factors. According to Stephenson, the ultimate goal of a Q-factor is Q-factors which cannot be identified by other means than using reference persons in the study (Stephenson, 1953). However, attempts have been made to use the test responses of the persons as a basis for factor identification. There are two methods used elsewhere to identify a factor. One is the use of r phis, but it is not appropriate in the present case because the rotational method of factor analysis systematically tries to maximize the number of high loadings and zero loadings in a factor. Therefore, the distribution of factor loading cannot be normal in the present case. The second method is phi-coefficient method. Values of phi-coefficients are dependent upon the number of persons in two categories i.e., "representing the factor"/ "not representing the factor". Therefore, this method is not appropriate as our sample consists of a small number of patients. But if we try to evaluate the discriminative power of an item (DMT variables in this case), with respect to persons representing the factor and not representing the factor, then the number of persons in each category is irrelevant. What we are concerned then, is the observation that how many persons in each category scored "one" and "zero".

Holley and Risberg (1972) proposed a method, namely the D-estimate to evaluate the discriminatory power of the items. D-estimate, a statistical index, is a means of evaluating items with respect to persons of a given factor. D-estimate for an item with respect to a Q-factor is computed by taking the proportion of "one responses, among the persons representing that factor, minus the proportion of "one" responses among the persons not representing that factor. Thus, D-estimate can vary from -1.00 to +1.00 and is resistant to changes in the number of persons in the categories.

However, there is always some information lost, when a variable is artificially dichotomized. This problem has been taken into consideration by Risberg (1972). This study presents an answer to this problem by proposing the D(W) index method. D(W) index is a development of D-estimate, and contains the following essential features:

1. Depending upon the magnitudes of their factor loadings in a certain factor the persons are divided into 3 categories:
 - a) clearly significant (who have factor loadings of .60 and above),

- b) barely significant (who have factor loadings .30 to .40),
- c) non-significant (who have factor loadings below .30).
- 2. Persons with "barely significant" loadings are excluded.
- 3. Persons with "non-significant" loadings are all considered as non-representatives of the factor.
- 4. Persons with significant loadings influence the index with respect to the square of their loading.

The D(W) index is apparently the most refined measure for identifying Q-factors by means of item-selection. We can also analyse the persons having negative loadings considered as negative representatives of the factor. However, in the present study no factor becomes bipolar i.e., no person gets .60 or more for the factors identified.

(Implications - when the purpose of a study is a factorical description of a certain domain, Q-technique has some disadvantage since Q-factor analysis is performed on a small sample. It might happen that several substantial factors previously established in a study do not turn up when a second population is analysed. It might also happen that several of the factors in the second study do not correspond to any of the factors established in the first study).

It is also necessary to prove that the factors are not the result of randomly arisen groupings.

ANALYSIS

9 factors were extracted. We looked at the dispersion of the eigenvalue which was as follows:

<u>Factors</u>	<u>Eigenvalues</u>
factor I	5.52
factor II	2.94
factor III	1.99
factor IV	1.68
factor V	1.41
factor VI	1.39

From factor I to factor II, there is a decline of eigenvalue which is of high order. But from factor IV downwards, the decline of eigenvalue is of a much lesser degree. We chose to rotate the first four factors. The four factors represent 0.36% of the total variance.

Variance

0 cycle	-	.2118
1st cycle	-	.2972
2nd cycle	-	.3513
3rd cycle	-	.3661
4th cycle	-	.3662
5th cycle	-	.3662

As is apparent from the analysis of variance that after the third cycle the variance is very low; it was decided to rotate the first four factors.

Rotation

Rotation is the changing of the arithmetic signs which geometrically means that we change the axis of the vector end for end e.g., what is at the extreme end of negative would now become extreme end of the positive. The principle of rotation is to make all factors' loadings positive and to make as many zeros as possible. (Note that the communalities remain the same regardless of the rotation). Their computations from the rotated coordinates serves as a numerical check-up of the process of rotation. Rotated factor matrix of this analysis is given below.

Table 9
Rotated Factor Matrix

Patients	F a c t o r s		
	I	II	III
1	.189	.097	.521
2	.031	.582	-.173
3	.212	-.058	.424
4	.447	.125	.141
5	.765	.014	.126
6	.829	.021	-.019
7	.345	-.187	.290
8	-.104	.007	.612
9	.114	.372	.509
10	.182	.345	.525
11	-.183	.631	-.001
12	.496	.459	.115
13	.537	.163	-.077
14	.366	.207	.443
15	.437	-.007	.237
16	.309	-.281	.645
17	.149	.696	-.031
18	.250	.581	-.018
19	.306	-.001	.488
20	.006	-.052	.397
21	.464	.234	.220
22	.785	.070	-.035
23	.022	.665	.126
24	.624	.128	.285
25	.084	-.186	.671
26	.088	.056	.180
27	.116	.477	-.094

1/ Now onwards, the patients would be referred to by the numbers given in this table.

The Representatives of the Factors

Those patients are considered as representing a factor who have .50 or more loading on it. Sixteen out of twenty seven patients have significant loadings i.e., .50 or above on the three factors. Since there is only one patient who is negative representative of factor IV with the loading of - .60 - - and it has no positive representative - - therefore, factor IV is excluded from further analysis.

Significant loading criterion for .50 and above was decided arbitrarily. Risberg (referred to earlier) considers .60 and above loadings as "clearly significant" and loadings between .30 to .40 "barely significant". We took the midpoint between .60 and .40, and decided that .50 and above loadings on a factor may be considered as representative loadings.

Patients who have less than .20 value on a factor were assumed to be non-representatives of that factor. Patients who had a loading between .21 to .49 were excluded from the factor identification analysis. The details of the representatives and non-representatives are given below.

Representatives and their Factor Loadings

Factors	I		II		III	
	Pts.No.	Loadings	Pts.No.	Loadings	Pts.No.	Loadings
	6	.82	17	.69	25	.67
	22	.78	23	.66	16	.64
	5	.76	11	.63	8	.61
	24	.62	18	.58	1	.52
					9	.50
	13	.53	2	.58	10	.50
(5 patients)			(5 patients)		(6 patients)	

Non-representatives and their Factor Loadings

Factor	I		II		III	
	Pts.No.	Loadings	Pts.No.	Loadings	Pts.No.	Loadings
	1	.18	1	.09	2	.17
	2	.03	3	-.05	4	.14
	8	-.10	4	.12	5	.12
	9	.11	5	.01	6	.01
	10	.18	6	.02	11	.00
	11	-.18	7	-.18	12	.11
	17	.14	8	.00	13	-.07
	20	.00	13	.16	17	-.03
	23	.08	15	.00	18	-.01
	26	.08	16	-.28	22	-.03

Non-representatives and their Factor Loadings
Continued

Factor	I		II		III	
	Pts.No.	Loadings	Pts.No.	Loadings	Pts.No.	Loadings
	27	.11	19	.00	23	.12
			20	-.05	26	.18
			22	.07	27	.09
			24	.12		
			25	-.18		
			26	.05		
(11 patients)			(16 patients)		(13 patients)	

Let us now take a look at the variables with significant discriminatory power presented in table 10.

Table 10
The Variables with Significant Discriminatory Power

Factor I	D(W) index
S age correct in series II by 15th exposure or later	-.65
No T-phase achieved in series I	-.65
No T-phase achieved in series II	-.65
No C-phase achieved in series I	-.62
No C-phase achieved in series II	-.60
Factor II	
Total defense signs in late phase of each series, 2 or more	.83
Projection in late phase	.83
Projection coding is 4 or more in both series	.80
Interserial correspondence of reaction formation	.70
Total defense signs (defense 7 and 8 excluded) in both series - late phases is 7 or more	.75
Turning against self one or more in late phase	.69
Positive affect expressed towards H	.69
S sex correct on 15th exposure or later in series I	.63
S never identified in series II	.62
Total defense signs are 11 or more in both series combined	.61

1/ The variables with D(W) index value of .60 and above are included.

Table 10 - Continued

Factor III	D(W) index
No T-phase achieved in series I	.70
No D-phase achieved in series II	.66

Factor I

From the variables of discriminatory power, it appears that representatives of factor I are high perceptual achievers i.e., they identify H and S correctly and recognize the threat from secondary and reach the correct phase.

Factor II

The representatives of factor II are high on defenses especially projection, reaction formation, turning against self even in late phase, which may perhaps be a reason that they do not identify S correctly in series II. Their total defenses are high. Interestingly they express positive affect towards H.

Factor III

The representatives of factor III are low perceptual achievers. There are only two items and both of them point to their complete blocking of threat perception. While the representatives of factor II "let themselves go" and report all kinds of distortions, for which defense signs are coded, the representatives of factor III just "don't see" anything.

Now we will compare the representatives and the non-representatives of a factor for the variables with the D(W) index of .50 and above which was determined as our criterion of significance for the variables.

Table 11

Factor I-Representatives' and Non-representatives' Response Characteristics on Significant Variables

	D(W) Index	Rep.(N 5)	Non-rep.(N 11)
No T-phase series I	-.65	0	9
No T-phase series II	-.65	0	6
S a.i. series II	.65	5 (avg.=11th exp.)	7 (avg. for 7 =15th exp.)
No C-phase series II	-.62	1	10
No C-phase series I	-.60	5	9
RF late phases	-.58	2	8
TA late phases	-.57	0	2
Total defense codings	-.52	avg.=10.2	avg.=19.27

Table 11 - Continued

	D(W) Index	Rep.(N 5)	Non-rep.(N 11)
S s.i. series II	.52	avg.=12th exp.	5 (avg. for 5=14th exp.)
IC projection	-.50	0	6

Numbers, when mentioned without being qualified, refer to persons key to abbreviations refer to the footnote 1/.

Additional analysis of the related variables is carried out for the three factors to examine the supplementary evidence for the significant variables. In factor I, the significant variables concern the perceptual achievement and low occurrence of total defense signs. Responses descriptive of the similar or related characteristics are analysed. In factor I, the significant variables concern the perceptual achievement and low defense signs. Additional analysis is carried out descriptively for the related items.

Table 12

Factor I - Additional Analysis of the Response Characteristics

	Rep. (N 5)	Non-rep. (N 11)
T-phase both series	5	0
C-phase both series	4	0
Coding LP	avg.=1.4	avg.=7.36
S i. series I	5 (avg.=15th exp.)	9 (avg.for 9=17th exp.)
S i. series II	5 (avg.=10th exp.)	6 (avg.for 6=18th exp.)
H i. series I	5 (avg.= 6th exp.)	10 (avg.for 10=16th exp.)
H i. series II	5 (avg.= 6th exp.)	10 (avg.for 10=19th exp.)
Total IC	4 (avg.for 4=3.25)	10 (avg.for 10=5.7)

From the D(W) index, it is observed that more representatives achieve T-phase and C-phase in both the series. In the second

1/ Key to abbreviations for table 11 to 17: RF - reaction formation; TA - turning against self; IC - interserial correspondences; LP - late phases; O - object; i - identification; a.i. - age identification; s.i. - sex identification; a.o.s.i. - atypical opposite-sex identification; v.f.i. - the very first identification; PA - positive affect.

series, the representatives identify S age and sex earlier than do the non-representatives. In general, their defense codings are fewer. In the late phases occurrence of "reaction formation" and "turning against self" is comparatively less. Interserial correspondence of projection is none. It can be said that "reaction formation", "turning against self", and "projection" is comparatively weaker in the representatives.

From the additional analysis, perceptual achievement of the persons of factor I is confirmed. T-phase, C-phase, H and S identification are achieved by the persons relatively earlier in both series. Interserial correspondence and the occurrence of defense codings in late phases is comparatively less amongst the persons. Thus, the persons of factor I reveal higher perceptual achievement and lower occurrence of the defense signs.

Table 13

Factor II - Representatives' and Non-representatives' Response Characteristics on Significant Variables

	D(W) Index	Rep. (N 5)	Non-rep.(N 11)
Total LP codings			
2 or more	.83	5	6
Projection LP	.83	5 (avg.=2.5)	4 (avg.for 4=1.0)
Projection codings			
4 or more	.80	4 (avg.for 4=4.0)	5 (avg.for 5=1.44)
Codings LP 7 or more	.75	5 (avg.=10.0)	5 (avg.for 5=4.20)
IC of RF	.70	5	0
TA in LP	.69	5	4
PA expressed towards H	.69	5	3
S s.i. series II	-.63	0	14
S s.i. series I	-.62	0	11
Total defense codings	-.61.	avg.=21.4	avg.=12.4
H o.i. series I	-.55	2	12
A.o.s.i. of S	.51	3	3
S-dystonic percepts	.50	4	0

Key to abbreviations on page 113.

Table 14

Factor II - Additional Analysis of the Response Characteristics

	Rep. (N 5)	Non-rep. (N 16)
Corresp. RF in LP	4	1
IC Projection	4	2
Corresp. Projection in LP	3	0
IC of TA	2	3
Corresp. TA in LP	2	2

Key to abbreviations on page 113.

Representatives of factor II, when compared with the non-representatives, are observed to have:

- a) a higher average of total defense codings,
- b) a higher average of late-phase defense codings,
- c) a higher interserial correspondence of defense codings.

Projection codings are more frequent and there is a higher frequency of its correspondence in the late-phases. Reaction formation codings are more frequent and there is a higher frequency of its correspondence in the series. Turning against self codings are more frequent though the sign is not differentiated for interserial correspondence or late-phase occurrence.

Additional analysis confirms the intensity of projection and reaction formation. There is a higher frequency of interserial correspondence and late-phase occurrence of projection. Correspondence of reaction formation is observed in the late-phases. But in comparison to projection and reaction formation, turning against self appears less dominant.

Thus, the representatives of factor II reveal higher defensiveness and a greater dominance of projection, reaction formation, and turning against self signs, in that order.

A Note on the Defensive Organization

The combination of the projection, the reaction formation, and the turning against self, in the case of the representatives of factor II, calls for a discussion on the defenses and their mode of functioning. What kind of relationship exists among the three defenses according to the psychoanalytic concept of defenses? What are the common denominators in these defenses?

There are several ways in which the defenses are classified in psychoanalytic theory according to the defenses' function and order of ontological development e.g., the classification of the primary and secondary defenses. "Repression and denial appear to

be basic (primary) and other defense mechanisms (secondary) appear to deal with the derivatives of these (primary) instinctual defenses" (Eidelson 1968, p. 93). Repression is considered to be the first and the primary defense mechanism of ego functioning. "It is considered, by some analysts, to precede all other defenses" (Eidelson 1968, p. 95). The function of other defenses is supposed to be that of completing the work left unfinished by repression. "It may be that other methods (of defense) have only to complete what repression has left undone" (A. Freud 1964, p. 55). The so-called secondary defenses function in different ways to defend against the anxiety.

These different ways of the functioning of the defenses are referred to as the functional modes of the defenses. The defenses are often classified according to their "coordinates" or "functional modes" (Waelder 1976, Sjöbäck 1973). The three coordinates or functional modes are:

- a) "blocking and inhibitory" (Sjöbäck 1973) or as termed by Waelder (1967), "inhibitive-rejective",
- b) "distortive" mode of functioning (Sjöbäck 1973),
- c) "channeling" (Waelder 1967) or "screening and covering" mode of functioning (Sjöbäck 1973).

1. Blocking and inhibitory mode of functioning

The function of some defenses is to block, evict or prevent the impulse from appearing in the conscious. This is carried out radically by repression and partly by isolation (Waelder 1967). The relationship between repression and isolation was first pointed out by Freud. Freud (1926) considered isolation and undoing as the "surrogates of repression" (cited from Sjöbäck, 1973, p. 111).

Thus, the blocking and inhibitory function is primarily accomplished by repression, and secondarily by isolation and undoing. The other two functional modes follow upon repression.

2. Distortive mode of functioning

The functional mode of distortion (Sjöbäck 1973) refers to the distortive transformations of instinctual drives and their representatives. Some defenses are conceptualized to distort

the drives, while others to distort the representatives of these drives. Freud mentioned regression, reversal, and turning around upon the individual's one self, as the defenses which distort the instinctual drives (Sjöbäck 1973, pp. 101-126).

Projection, displacement, and identification defense

(identification with the aggressor) perform the function of distortion of the representatives of the drives (Sjöbäck 1973, pp. 101-126).

3. Screening and covering mode of functioning

Screening and covering refers to the defensive processes by which the mental contents are prevented from appearing in the conscious, and are substituted by the disguised or opposite forms.

The function of such screening and covering is mainly performed by reaction formation. Anna Freud (1965) has described reaction formation in this way: "as a result of a defense on the part of the ego, some of them (the drives) are eliminated from the conscious self altogether (by repression); others are turned into their opposites which are more acceptable (by reaction formation)" (A. Freud, cited from Sjöbäck 1973, p. 117).

In view of the functional modes of the defenses, we can now reflect upon the relationship of the defenses observed among the representatives of factor II, viz. projection, reaction formation, and turning against self. Projection and turning against self are related to each other by their common mode of functioning i.e., the mode of distortion of the instinctual drives and their representatives. Reaction formation indicates a different mode of functioning, that is of screening and covering the instinctual drives and their representatives. Thus, the combination of two functional modes of defenses is observed in the representatives of factor II.

The description of the representatives' defenses as distortion-covering appears apt, in the light of the analysis of other variables. The evidence for "distortion" is observed in their tendency for misidentification of the secondary figure.

The evidence for "covering" is observed in their tendency for expression of positive affect towards H and in release of their aggression by the perception of the secondary figure under threat or disaster. The distortion of S particularly suggests that the defenses with distortion-covering mode are at work.

Table 15

Factor III - Representatives' and Non-representatives' Response Characteristics on Significant Variables

	D(W) Index	Rep. (N 6)	Rep. (N 13)
No T-phase series I	.70	5	0
No D-phase series II	.66	4	not applicable
S a.i. late series II	.54	5	4
H v.f.i. late series I	.53	6	0
H o. unidentified series II	.52	5	3
Total LP codings less than 4	.52	2	9
H i. late series I	.50	6	0
H i. late series II	.50	4	3

S a.i. "late" is 15th exp. or later. H v.f.i. "late" is 15th exp. or later. H late identification for series I and II is 15th and 13th exp. respectively.

The two most significant variables (with the D(W) index of .70 and .66) are the T-phase and the D-phase, which indicate near absence of threat perception in the case of the representatives of factor III. It indicates, that not only the threat was not perceived, but that the perception of any unpleasant or discomforting stimulus was also infrequent. Referring to the functional mode of defenses, this signifies complete blocking of the threat from the conscious. Repression and isolation, whose characteristic mode of functioning is blocking and inhibitive, should be ideally expected in such a case but they do not figure among the significant variables. A possible reason for this could be that the criteria for repression and isolation were set too high for the computer analysis. Additional analysis was carried out to examine the occurrence of repression and isolation among the representatives and non-representatives of factor III.

Table 16

Factor III - Additional Analysis of the Response Characteristics

	Rep. (N 6)	Non-rep. (N 13)
Repression codings total	avg.=5.3	avg.=2.3
Repression in LP	1	2
IC of repression	1	0
Isolation codings total	avg.=6.16	avg.=1.9
Isolation in LP	5 (avg.=3.0)	8 (avg.=0.76)
IC of Isolation	4	3

List of abbreviations on page 113.

No representatives, with the exception of one achieved T-phase. Four of them did not achieve even the D-phase. Identification of H and H object was either delayed or not achieved; on the average, H was identified for the very first time as late as the 19th exposure in series I, and by the 11th exposure in series II. No representatives, with the exception of one, identified H object correctly. From additional analysis, a greater occurrence of repression and isolation signs is observed. The nearly complete blocking of the threat perception indicates, that the functional mode of the defenses of the representatives is that of blocking and inhibition. Thus, the representatives of factor III reveal low perceptual achievement, high defensiveness, and a blocking and inhibitory functional mode of defense.

Let us now examine how the factors compare with one another to the variables which had significant D(W) index, and those which were included for additional analysis of the response characteristics of the representatives and non-representatives.

Table 17

Comparative Description of the Factors' Response Characteristics

	F a c t o r s		
	I (N 5)	II (N 5)	III (N 6)
T-phase series I	5	4	0
T-phase series II	5	2	2
T-phase both series	5	2	0
C-phase series I	5	2	0

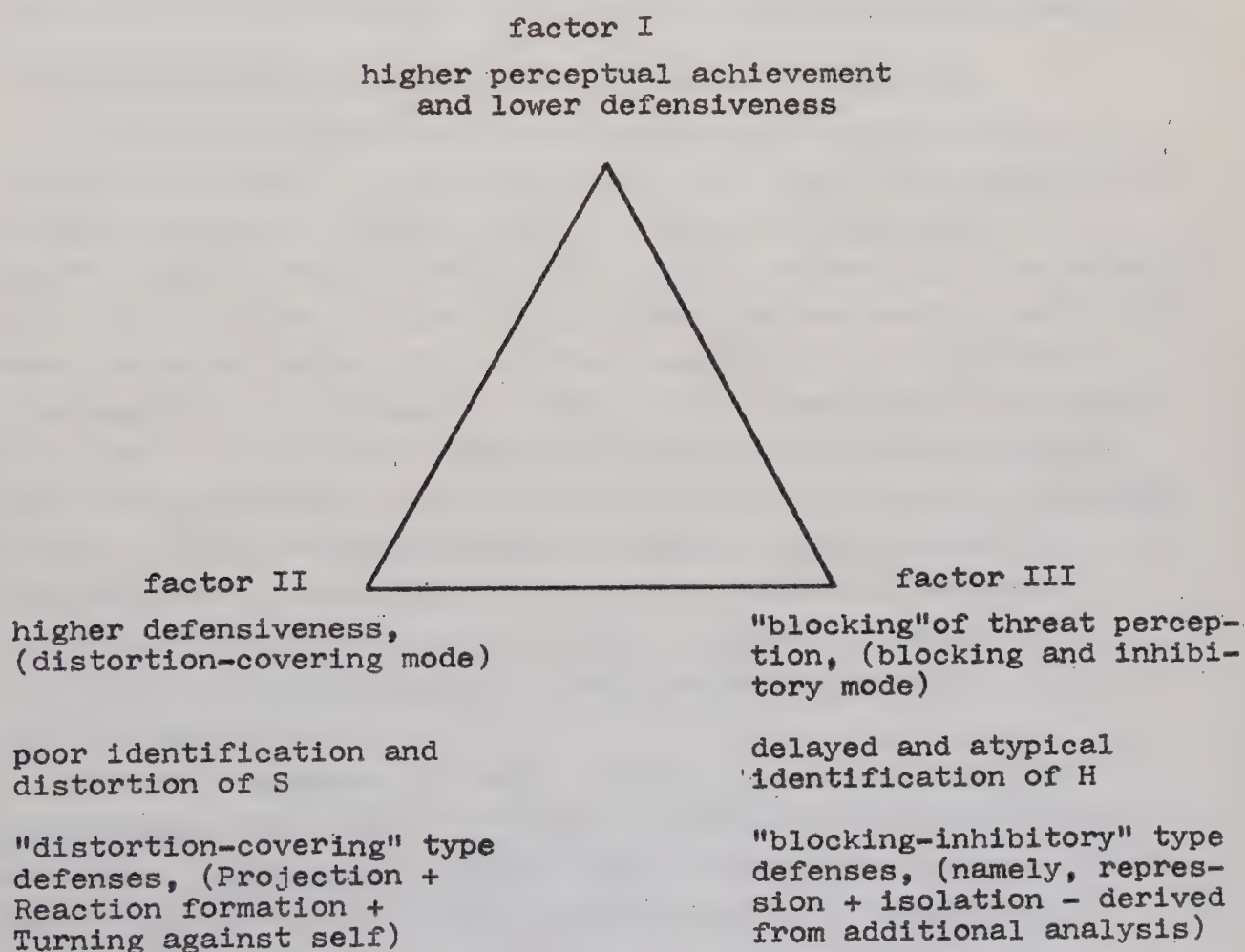
Table 17 - Continued

	F a c t o r s		
	I (N 5)	II (N 5)	III (N 6)
C-phase series II	4	0	0
C-phase both series	4	0	0
H i. series I	avg.=7th exp.	avg.=16th exp.	avg.=19th exp.
H i. series II	avg.=6th exp.	avg.=5th exp.	avg.=11th exp.
S i. series I	avg.=15th exp.	avg.=16th exp.	avg.=14th exp.
S i. series II	4	0	2
S s.i. series II	5	0	4
S a.i. series II	5	0	5
S a.o.s.i.	0	3	2
H o.i. series I	4	3	5
H o.i. series II	2	4	1
PA towards H	2	5	1
D-phase series I	5	5	3
D-phase series II	5	5	2
v.f.i. series I	avg.=7th exp.	avg.=9th exp.	avg.=19th exp.
v.f.i. series II	avg.=6th exp.	avg.=4th exp.	avg.=12th exp.
Repression codings	avg.=2.8	avg.=2.2	avg.=5.3
Isolation codings	avg.=0.8	avg.=2.6	avg.=6.16
RF codings	avg.=2.6	avg.=7.0	avg.=0.83
Projection codings	avg.=2.6	avg.=4.0	avg.=2.16
S-dystonic percepts	0	4	1
Total defense			
codings	avg.=10.2	avg.=21.4	avg.=16.0
Isolation in LP	avg.=0.2	avg.=0.2	avg.=3.0
RF in LP	avg.=0.4	avg.=2.0	avg.=0.66
TA in LP	avg.=0.0	avg.=2.7	avg.=0.0
Projection in LP	avg.=0.2	avg.=2.5	avg.=0.83
Total codings in LP	avg.=1.4	avg.=10.0	avg.=6.0
IC if RF	2	5	1
IC of RF in LP	0	4	0
IC of Projection	0	4	1
IC of Projection			
in LP	0	3	0
Total IC of signs	avg.=2.6	avg.=5.4	avg.=3.5

A Note on the Rotation of the Factors

It appears that factor III is rotated against factor I which is characterized by high perceptual achievement. Factor I rotated against factor II which is characterized by high defensiveness and distortion-covering type defenses. Factor III is rotated against the representatives of factor II which is characterized by the defensive functional mode of distortion-covering. Factor II adds content to the stimuli while factor III reduces it. Factor II atypically identifies or distorts the perception of S while factor III atypically identifies or delays the identification of H. A tentative interpretation regarding the "meaning" of factors is now attempted. Let us look at the following diagram which takes the shape of a triangle:

Interpretation of Factors Rotation



(Note: the distances as shown in the diagram are not the geographical representation of quantitative relationship between the factors.)

Factor I in both series shows high perceptual achievement in terms of recognition of figures, objects, and the threat. The defense signs are generally low. Factor II, in comparison with factor III, shows greater perceptual achievement in series I, but possibly reacts to threat perception by opposite or countering affect towards the secondary figure, with the result that threat perception and S identification deteriorates in series II. Positive affect is expressed towards H presumably as a countering affect to threat. Projection, reaction formation, turning against self are more active. Factor III reveals poor threat perception and Hero identification in series I and remains occupied with the task of figural identification. Perception of threat and the qualities and attributes of the figures are perceived infrequently.

The Discrimination of Factors on Personality Variables

As we are interested in the application of the DMT in a clinical setting, we must investigate if a meaningful relationship exists between the factors and the clinical dimensions. Are the factors also discriminated on the criteria for the clinical variables? Factors without clinical meaning are hardly useful for practical application. On the other hand, if the interfactor heterogeneity, with regard to the clinical variables is meaningful, than the observed discriminations may be further investigated for evaluating the predictive validity of the DMT variables. Besides, it is imperative that the factor interpretation is supplemented by independent information about the factor's representatives on similar or related aspects by means of psychiatric ratings, anamnestic data, personality tests, etc., (see Johnsson 1976).

For this purpose, we have utilized the representatives' self-ratings with regard to their own adaptive and non-adaptive behaviour, therapists' ratings with regard to the representatives' adaptive abilities and defense mechanisms, and therapeutic

performance checklists, notably the transference behaviour checklist and the therapeutic improvement checklist.

As we assume that there is a relationship between the DMT and the personality variables and that factors, to some extent, are determined by the personality-clinical characteristics, we hypothesize that they will significantly differ with one another, with regard to the personality-clinical variables analysed from the independent data.

Hypotheses with regard to the discrimination of the factors on personality variables are to be formulated on the basis of tentative interpretations of the factors as follows:

1. Factor I, due to the high perceptual achievement and low frequency of defense signs, is of ego strength. (Factors II and III, due to the high frequency of defense signs, are of high defensiveness, but the functional modes of their defenses are different).
2. Factor II is of high defensiveness with characteristically high distortion and covering type defenses.^{1/} Since its perceptual achievement is higher than that of factor III, it is interpreted as the factor with moderate ego strength.
3. Factor III is also of high defensiveness but with characteristically high blocking and inhibitory type defenses. Low ego strength is interpreted on account of low perceptual achievement and almost complete blocking of threat perception. Note that "high", "low", and "moderate" are not absolute terms; they are used relatively and only within the context of the three factors.

Hypothetically, if we are using a scale of ego strength, the factors are placed in the following position:

Ego strength:	factor I	factor II	factor III
	high	moderate	low

1/ The term : "defensive organization", "type of defenses", "functional mode of defenses", and "defense", are used interchangeably.

If we are using a scale of defensiveness, the factors are placed in the following position:

Defensiveness:	factors II and III	factor I
	high	low

If we are using a scale of functional mode of defense, the factors are placed in the following position:

Distortion and covering:	factor II	factors I and II
	high	low
Inhibitory and blocking:	factor III	factors I and II
	high	low

We will now discuss the general assumptions on which the factors interpretations are based.

The General Assumptions

1. Assumptions regarding defense and defensiveness

It is assumed that the defense signs measure the actual defenses employed by the individual in therapy and other life-situations. The frequency of the sign codings, interserial correspondence, and late phase occurrences indicate the dominance of particular defenses. The total occurrence of the defense signs indicate the defensiveness of the individual. As regarding these assumptions, factor I has lower defensiveness and less interference by the various defenses while factors II and III have higher defensiveness and greater interference by the various defenses in the situations such as work, therapy, social relations, etc.

2. Assumptions regarding the functional modes of defenses

The defenses analysed as significant in combination with

defenses of similar functional mode indicate the characteristic functional mode of the individual.

We assume that factor II will "distort and cover" the reality of both sorts, the internal as well as the external. As the defenses of projection (especially 9:20) and reaction formation were particularly employed towards S, we expect that the reality of the object and its representations will be particularly distorted. Whereas, the blocking of threat-perception is the major evidence, the greater occurrence of repression and isolation signs could be considered as being supportive evidence for blocking and inhibitory mode of factor III. Their perceptual reports give an impression of being skeletal, i.e., reduced in content and devoid of any feelings, emotions, and themes. In contrast to this, the perceptual reports of factor II are rich in content (definitely more voluminous), often depicting feelings, emotions, and conflicts related to the figures.

3. Assumptions regarding the ego strength

High perceptual achievement on DMT may be attributed to:

- a) stimulus-adequate perception,
- b) low defense signs,
- c) low interference by defensive processes enabling the individual to achieve perceptually.

The above features refer to the following aspects of ego strength:

- a) status of the reality testing function of the ego (also termed as "reality ego"),
- b) status of defenses,
- c) status of ego autonomy.

The relationship between perceptual achievement and ego strength is discussed in the DMT Analysis Scheme. However, a few comments on the aspects of ego strength are made to clarify their relationship with perceptual achievement and to underline the basis of our assumptions, regarding the ego strength.

Status of Reality Testing Function of the Ego

The function of reality testing could be a measure of ego strength (Bellak 1956, discussed earlier).

Hartmann (1964) referring to perception, motility, and other autonomous functions of the ego, states that "their use independent of immediate needs, and in a more differentiated relation with external stimuli, is already part of the development of the reality ego" (p. 167). As the ego develops, perceptual and other autonomous functions come under the control of the ego" (Hartmann 1964, pp. 155-181). If the perceptual processes are excessively influenced by the immediate needs or the defenses, it would imply that either the reality ego is underdeveloped or impaired. Thus, the stimulus-adequate perception would indicate that the ego is performing its function of the reality testing adequately.

Status of Ego Autonomy

The ego autonomy refers to the degree to which ego is allowed to carry out its function without encroachment or interference by the drives and the defenses (Hartmann 1964, pp. 113-141). As we are concerned here with the perceptual functions of the ego, the autonomy in this context refers to the degree to which the ego is allowed to carry out its function of stimulus-adequate perception, without the distortions effected by the drives or the defenses. Hartmann considers the relative freedom of autonomous functions from the defenses as an important aspect of ego strength. He states, that "any definition (of ego strength) must include, as essential elements, the autonomous functions of the ego.....and especially whether or, how far they are able to withstand impairment through the processes of defense (Hartmann 1964, p. 140).^{1/} Thus, the perceptual achievement (T-phase, C-phase, etc.), inspite of the defenses aroused by threat from the peripheral figure, indicates that testing function is relatively unimpaired, and the

1/ The text in the brackets is added by the present author.

ego is relatively free to carry out its autonomous functions.

Status of Defense

Defense, to a moderate degree contributes to the adaptive functioning of the ego, but if used excessively it results in ego weakness. Hartmann (1964) states: "the defenses may..... become the very reason of ego weakness" (p. 140). Thus, moderate use of defense with high perceptual achievement would indicate ego strength.

We will now discuss the specific assumptions in context of the clinical data, and formulate appropriate hypotheses to examine if the factors significantly differ with each other in a meaningful way.

Analysis of the Personality Variables

Adaptive-Nonadaptive Behaviour Self-Ratings

A. Sums of self-ratings for adaptive and nonadaptive behaviour

Here we are interested in the variance which may be related to the actual state of adjustment of the individuals. We assume that as factor I has greater ego strength and thereby greater adjustment, the persons will rate themselves higher on the statements concerning the adaptive behaviour, when compared with those of the other two factors. Furthermore, as factors II and III have lower ego strength and thereby lower states of adjustment, the persons would rate themselves higher on statements concerning nonadaptive behaviour, when compared with those of factor I.

Hypotheses:

For the self-ratings on statements concerning the adaptive and nonadaptive behaviour were formulated according to the above assumption.

B. Desirability analysis

The defensive processes will interact with the desirability factor and the response tendency. Persons of factor

II, due to the characteristic functional mode of their defenses, would distort and cover the disagreeable reality about themselves. Thus, they would tend to rate themselves higher for desirable qualities and lower for undesirable qualities. According to the psychoanalytic theory, projection and reaction formation are considered ego-syntonic (Sjöbäck 1973). Unacceptable feelings, impulses, and ideas are ascribed to others, or turned into their opposites by projection and reaction formation. As factor I is guided by the reality factor, the persons are expected to rate themselves realistically for the desirable and undesirable qualities.

Persons of factor III are expected to block and inhibit the information about themselves, possibly by selecting the noncommittal "neutral" or near neutral points, both for the desirable and undesirable qualities.

Hypotheses:

1. The sums of scores of factor II, on the desirable statements, will be higher than those of factors I and III.
2. The sums of scores of factor II on the undesirable statements, will be less than those of factors I and III.

C. Response Tendency Analysis

Factor II would use extreme ratings. Distortion and covering would be affected by the ratings of "extremely unlike me" when it is really perceived at the subconscious level as "exactly like me", and vice-versa. This kind of defensive self-rating is analogous to the operation of countering defensive processes by means of projection and reaction formation (Sjöbäck 1973, pp. 101-126).

The tendency in factor III is expected to be that of repressing and isolating the mental content, and consequently revealing little. Repression prevents the anxiety-provoking mental content from appearing in the conscious. In isolation, the experience of feeling may be difficult, due to the isolation of the feeling from the ideas. Answers considered to be typical manifestations of repression and isolation are: "I don't know", "I can't feel", or "I can't remember", etc.

It may be deduced from the above that factor III will tend to give neutral ratings which are provided in the scale for when the individual does not know or cannot decide.

Persons of factor I are expected to rate as the statement objectively applies to them. It is expected that the response tendency may vary, with respect to desirable and undesirable statements, already stated for the desirability, will be used in formulating hypotheses for the interaction between response tendency and desirability.

Hypotheses:

1. The number of extreme ratings of factor II will be higher than those of factors I and III.
2. The number of neutral ratings of factor III will be higher than those of factors I and II.
3. On desirable statements, the number of "exactly like me" ratings of factor II will be higher than those of factors I and III.
4. On desirable statements, the number of "extremely unlike me" ratings of factor II will be less than those of factors I and III.
5. On undesirable statements, the number of "exactly like me" ratings of factor II will be less than those of factors I and III.
6. On undesirable statements, the number of "extremely unlike me" ratings of factor II will be more than those of factors I and III.
7. On desirable statements, the number of neutral ratings of factor III will be more than those of factors I and II.
8. On undesirable statements, the number of neutral ratings of factor III will be higher than those of factors I and II.

Table 18

Comparison of Factors, Self-Ratings of Adaptive and Nonadaptive Behaviour, Desirability, and Response Tendency

Self-ratings	F a c t o r s (t values)		
	IxII	IxIII	IIXIII
Adaptive attitudes	0.58 (NS)	0.76 (NS)	0.66 (NS)
Adaptive-cognitive	0.94 (NS)	1.82 (NS)	1.43 (NS)
Adaptive control			
expression	1.63 (NS)	1.57 (NS)	0.69 (NS)
Total adaptive			
behaviour	0.43 (NS)	0.65 (NS)	1.18 (NS)
Maladaptive response	0.51 (NS)	0.94 (NS)	1.17 (NS)
Dyscognitive evaluative	0.32 (NS)	0.26 (NS)	0.73 (NS)
Overcontrol and			
suppression	2.23 (.05)	0.62 (NS)	3.4 (.01)
Experienced anxiety	0.40 (NS)	1.44 (NS)	3.2 (.01)
Total nonadaptive			
behaviour	0.40 (NS)	1.14 (NS)	0.99 (NS)
On d.s.	2.18 (NS)	0.63 (NS)	2.5 (.05)
On u.d.s.	0.63 (NS)	1.2 (NS)	3.6 (.01)
Total number of ($\pm$)			
ratings	1.12 (NS)	1.69 (NS)	0.6 (NS)
Total number of (0)			
ratings	0.4 (NS)	2.3 (.05)	2.4 (.05)
(+) on d.s.	0.75 (NS)	1.7 (NS)	0.54 (NS)
(-) on d.s.	0.66 (NS)	1.15 (NS)	0.8 (NS)
(0) on d.s.	0.3 (NS)	2.7 (.02)	2.4 (.05)
(+) on u.d.s.	0.5 (NS)	0.95 (NS)	0.5 (NS)
(-) on u.d.s.	0.68 (NS)	0.6 (NS)	0.79 (NS)
(0) on u.d.s.	0.35 (NS)	0.46 (NS)	2.1 (NS)

't' test (one tailed) was applied to compare the sums of ratings and scores of factors. Number of persons representing factor I, II, and III is 5, 5, and 6 respectively. Levels of significance are given in the brackets.

Abbreviations: d.s. - desirable statements; u.d.s. - undesirable statements; ($\pm$) - extreme ratings; (+) - "exactly like me" ratings; (-) - "extremely unlike me" ratings; (0) - neutral ratings.

Table 19

Comparison of Factors' Mean on Significant Variables

Variables	Lower mean	Higher mean
Overcontrol and suppression	II	I (x)
	II	III (xx)
Experienced anxiety	III	II (xx)
Sum of scores on desirable statements	III	II (x)
Sum of scores on undesirable statements	III	II (xx)
Neutral response tendency	I	III (x)
	II	III (x)
Neutral response tendency on desirable statements	I	III (x)
	II	III (x)

The factor is placed in the columns "higher mean" or "lower mean" according to its mean position, when compared with that of the factor with which it significantly differed (refer table 18). Level of significance is given in the brackets according to the stars system (x).

Ratings by the Therapists

Adaptive Abilities

As factor I is assumed to have greater ego strength, we expect the therapists to rate the persons high on adaptive abilities.

The first three adaptive abilities, viz. the adaptive cognition, the empathy and emotional understanding of others, and the recognition and acceptance, refer to the environmental reality testing and the internal reality testing pertaining to one's own feelings and behaviour (see A.A. Rating Scale-Appendix).

We expect that the therapists of persons belonging to factor I will rate them particularly high on these three adaptive abilities.

Hypotheses:

1. Factor I will obtain a higher sum of total adaptive abilities ratings when compared with those of factors II and III.

2. The persons of factor I will obtain higher sums of ratings on adaptive cognition + empathy and emotional understanding of others + recognition and acceptance, when compared with those of factor II and III.

Defense Mechanisms Ratings

As factor I is assumed to have lower defensiveness, we expect that therapists will rate these persons low on the defense mechanisms. As opposed to this, the therapists of the persons of the other two factors are expected to rate them high on the various defense mechanisms.

Since projection, reaction formation, and turning against self are dominant in factor II, we expect that the therapists will rate these persons high on these defenses. On account of the complete blocking and inhibition of the threat perception and relatively higher codings of repression and isolation signs, we expect that the therapists of persons of factor III will rate them high on repression and isolation.

Hypotheses:

1. Factor I will obtain lower sums of "total defense ratings", when compared with those of factors II and III.
2. Factor II will obtain higher sums of ratings on projection + reaction formation + turning against self, when compared with those of factors I and III.

Sub-hypothesis:

Since turning against self was a relatively less dominant sign when compared with projection and reaction formation, it is hypothesized that factor II will obtain higher sums of ratings on projection + reaction formation, when compared with those of factors I and III.

3. Factor III will obtain higher sums of ratings on repression + isolation, when compared with those of factors I and II.

Table 20

Comparison of Ratings Given by the Therapists of Factors'
Adaptive Abilities and Defense Mechanisms

Variables	F a c t o r s ('t' values)		
	IxII	IxIII	IIxIII
<u>Adaptive abilities</u>			
Total adaptive abilities	.85 (NS)	2.08 (NS)	
Adaptive cognition + empathy ...+ recognition and acceptance	1.43 (NS)	4.97 (.001)	
<u>Defense mechanisms</u>			
Total defense ratings	3.72 (.01)	3.06 (.02)	
Projection + RF + TA	3.77 (.01)		4.84 (.001)
Projection + RF	3.67 (.01)		7.2 (.001)
Repression + isolation		1.72	3.86 (.01)

't' test (one tailed) was applied to compare the sums of ratings given by the therapists. Level of significance is given in the brackets. Key to abbreviation on page 113.

Let us now take a look at the mean of therapists ratings for each factor for the variables on which significant results were observed.

Table 21

Comparison of Factors' Mean of Ratings on
Significant Variables

Variables	Lower mean	Higher mean
Adaptive cognition + empathy ... + recognition and acceptance	III	I (xxx)
Total defense ratings	I	II (xx)
	I	III (x)
Projection + RF + TA	I	II (xx)
	III	II (xxx)
Projection + RF	I	II (xx)
	III	II (xxx)
Repression + isolation	II	III (xx)

In the table 21, the factor is placed in the columns "higher mean" or "lower mean" according to its mean position when compared with that of the factor with which it significantly differed (refer table 20). Level of significance is given in the brackets according to the star system (x).

Treatment Process Variables

The defensive organization of the factors has implications in terms of the treatment process, particularly transference behaviour and therapeutic improvement. Ad-hoc analysis carried out from the therapist' interview material for the above two variables.

Transference Behaviour

According to the psychoanalytic theory, transference refers to the process by which feelings and reactions, which applied to the parents or other significant figures of the past, are transferred to the person seen as the "reincarnation" of the early figure (refer to Freud's definition of transference presented in the working model - Introduction). To some extent, the patterns of early basic object-relations are transferred to all other relationships in later life with subsequent modifications and developments. In therapeutic usage, transference has acquired a broader meaning. According to therapists it refers to the patient's all such feelings, emotions, and reactions which appear exaggerated or incongruent with the reality of the therapeutic relationship. The term "transference behaviour" is used to convey the broader meaning of transference. Due to the distortion of S and the dominance of projection and reaction formation signs in the DMT by factor II, it was expected that the same mechanisms would be employed in the treatment process to distort the reality relationship with the therapist. The treatment process confronts the patient and brings him closer to the unacceptable feelings and impulses. The therapist is likely to be perceived both as the libidinal and the threatening object. The unacceptable feelings and impulses are more likely to be projected

onto the therapist, or turned into their opposite by the counter-acting defensive processes. Projection and reaction formation would thus contribute to the distortion of the reality of the therapist's relationship. A stronger positive and/or negative transference is likely to be aroused consequently. Such strong transference behaviour is not expected in the case of factor III. Positive and negative feelings, if unacceptable to the conscious, are to be blocked and inhibited. Isolation may be employed to maintain an unemotional or an intellectual relationship with the therapist. In clinical experience, the emotional experience or the feelingful relationship in the treatment takes a long time to develop, if isolation defense is prominent. Repression, which is considered to be the basis of transference, allows the latter to appear on the surface only when the former is, to some extent, worked through by the therapeutic efforts. Factor III is therefore likely to resist transference and remain distant, uninvolved, and uncommitted. Factor I is expected to fall between the two extremes if the transference behaviour of factor II is of one extreme and that of factor III is of another, the persons of factor I, along with a moderate transference behaviour, are expected to form a warm and trusting relationship with the therapist, required for a working alliance.

Two checklists are used in the ad-hoc analysis, the Transference Behaviour Checklist and the Improvement Criteria Checklist (to be presented later). To minimize the subjective bias, the co-judge involved in Study 1 for the personality variables was requested to act in the same capacity for the two checklists. These variables also demanded the use of dichotomous categories i.e., presence or absence of "high transference behaviour loading" on the transference behaviour checklist, and presence or absence of "satisfactory improvement" on the improvement criteria checklist. The same procedure stated in Study 1 was adopted to compute the G-index of agreement between the co-judge and the investigator. The G-index of agreement between the two judges was .88 on the variables of high transference

behaviour loading and satisfactory improvement. In all, there was disagreement in three cases which was absolved in agreement with the co-judge.

Transference Behaviour Checklist

Transference behaviour reported in the therapist's interview was analysed with the transference behaviour checklist used at the psychotherapy workshop of the BM Institute.^{1/} The checklist was prepared by the workshop to differentiate the transference behaviour into its various aspects. The following four aspects are differentiated by the checklist:

1. The positive transference ("affectionate" transference).
2. The negative transference ("hostile" transference).
3. The "emotive" (emotional behaviour which is directed towards the therapist but which cannot be clearly identified as positive or negative).
4. Transference-avoidance (non-relating type, or behaviour of avoiding the emotional involvement with the therapist).

Positive and negative transference was differentiated by Freud (1910). Referring to the transference behaviour, he said: "the patient, that is to say, directs towards the physician a degree of affectionate feeling (mingled, often enough, with hostility" (ibid, p.51). Nagera et al (1970) emphasized the need for such differentiation: "but it is now clearly essential to differentiate transference into its various aspects: positive (affectionate) and negative (hostile) transferences..."

The "emotive" category in the transference checklist was evolved by the workshop to include the emotional behaviour which is directed towards the therapist but cannot be clearly identified as positive or negative transference behaviour. The transference avoidance behaviour category was evolved to identify the patient's behaviour of avoiding or denying any emotional involvement with the therapist.

1/ BM Institute of Mental Health , Ahmedabad, India.

The Checklist Items

Twenty nine items refer to the display of various kinds of feelings and emotions which can be classified as of a positive, negative, emotive, or transference-avoidance behaviour.

Positive transference behaviour	- 12 items
Negative transference behaviour	- 10 items
Emotive	- 4 items
Transference-avoidance behaviour	- 3 items

Transference Behaviour Loading

Transference behaviour loading is determined by the number of transference items present in the report.

Procedure: all the transference behaviour items are totalled. The transference-avoidance items are excluded from the counting. Thus, the transference behaviour loading was equal to the number of transference behaviour items - transference-avoidance items.

"High" and "Low" Transference Behaviour Loading

The average transference behaviour loading is computed for the factors' representatives. Higher than average transference behaviour loading would be considered as the "high transference behaviour loading". Below than average transference behaviour loading would be considered as "low transference behaviour loading".

Hypothesis:

More persons of factor II will obtain "high transference behaviour loading" when compared with those of factors I and III.

Table 22
Comparison of Factors' Transference Behaviour

	High transference behaviour loadings	
	+	-
Factor II	5	0
Factor I	0	5
P=.0039 (xx)		

Table 22 - Continued

	High transference behaviour loadings	
	+	-
Factor II	5	0
Factor III	1	5
		P=.0129 (xx)

Fisher's exact probability test (one tailed) was applied to compare the factors with regard to the presence and absence of high transference behaviour loading.

As predicted, factor II differs significantly from factors I and III on the criteria for high transference behaviour loading. The distribution of the frequencies in the cells indicate that more persons of factor II tend to obtain high transference behaviour loading when compared with those of the other two factors.

Therapeutic Improvement

The motivation, insight, working alliance, accessibility to interpretations, conflict resolution, personality reconstitution, and in fact the whole therapeutic success depends on the basic ego strength, and the ego autonomy for the adaptive functioning of the ego. Rating scales to evaluate the efficiency of brief psychotherapy and the process of successful therapeutic change constructed by Bellak (1965, pp. 130-148), are a case in point which focus on the ego functions and the ego strength. It is expected that factor I will show greater improvement in the treatment process. As opposed to this, factor II and III are expected to show comparatively less improvement. Although the assessment of the therapeutic outcome would have been more satisfactory if it was carried out after a uniform duration of treatment, or at the time of the termination of the treatment, the relative degree of improvement even at this stage may be evaluated to test the assumptions regarding the perceptual

achievement and the ego strength. The Improvement Criteria Checklist was employed for the purpose of evaluating the degree of improvement.

Improvement Criteria Checklist

The therapeutic gains, and the outcome reported in the therapist's interview, was analysed with the improvement criteria checklist. It is used at the psychotherapy workshop of the B.M. Institute to identify the therapeutic success in psychotherapy cases. The checklist was compiled in view of Malan's proposition of "symptomatic", "dynamic", and "situational" criteria for evaluating the therapeutic outcome (Malan, 1963).

The checklist identifies the therapeutic gains on "symptomatic criteria", "dynamic criteria", and "behavioural criteria". The situational criteria were omitted on account of their dependence on the "situations". In many cases the evaluator has to wait until the "situation" recurs in the patient's life. Instead, the behavioural criteria were introduced in the checklist as the behavioural changes can be observed without such waiting. Introduction of the behavioural criteria, in evaluation of the therapeutic success, has been suggested by many researches. Bellak (1961) lists the following criteria for success which are used by the investigators of the psychotherapy:

1. "Loss of symptoms,
 2. Adjustment socially, occupationally, and sexually,
 3. Patient's satisfaction with outcome of psychotherapy,
 4. Doctor's satisfaction with outcome of psychotherapy",
- (ibid., p. 108)

Checklist items

The items are included under the three improvement criteria:

- | | |
|--|-----------|
| 1. Symptom relief (i.e., the symptomatic criteria) | - 8 items |
| 2. Psychodynamical improvement (i.e., the dynamic criteria) | - 6 items |
| 3. Positive behavioural changes (i.e., the behavioural criteria) | - 7 items |

"Satisfactory improvement"

Satisfactory improvement is based on the fulfilment of the following conditions:

1. Improvement must be observed on the psychodynamical criteria.
2. Psychodynamical improvement must be accompanied with "symptom relief" or "positive behavioural changes".

The improvement criteria checklist is appended with the report.

Hypothesis:

More persons of factor II will show "satisfactory improvement" when compared with those of factors II and III.

Table 23
Comparison of Factors' Satisfactory Improvement
During Therapy

	Satisfactory improvement	
	+	-
Factor I	3	2
Factor II	1	4
		P=.2619 (NS)
Factor I	3	2
Factor III	0	6
		P=.0606 (NS)

Fisher's exact probability test used to compare the factors.

Factor I does not differ significantly from the other two factors, on the criteria for satisfactory improvement. Quite possibly, the criteria for satisfactory improvement are too stringent. Improvement on dynamical criteria is ambitious and should be generally expected in the case of successful termination of the treatment. In view of this possibility, the criteria of improvement were then modified by excluding the dynamic criteria. According to the modified scheme, if symptomatic improvement is accompanied by behavioural change, it shall be considered as "improvement".

Hypothesis:

More persons of factor I will show "improvement" when compared with those of factors II and III.

Table 24
Comparison of Factors' Improvement During
Therapy

	Improvement	
	+	-
Factor I	5	0
Factor II	3	2
		P=.2222 (NS)
Factor I	5	0
Factor III	2	4
		P=.0454 (x)

Fisher's exact probability test was used to compare the factors.

When the improvement on symptomatic criteria + behavioural criteria was analysed, the persons of factor I do not differ significantly from those of factor II but they do so when compared with those of factor III.

DISCUSSION

The three factors are discriminated with regard to a few variables of self-ratings, therapists' ratings, transference behaviour and improvement. However, a large number of hypotheses, postulated for interfactor heterogeneity on self-ratings, are not validated. As the reliability and validity of the self-rating scale is not evaluated, we do not know to what extent, or in what manner, the patients vary, with respect to this instrument. However, self-inventories which are well studied, indicate that the population variance (Nunnally 1967, pp. 559-622), to a large extent, could be attributed to: (1) actual state of adjustment of the individual i.e., self-adjustment, (2) knowledge of one's

own personal characteristics i.e., self-knowledge, (3) frankness in communicating what one knows about oneself i.e., self-disclosure. The three variables, to some extent, are influenced by or interact with desirability (termed as social and self-desirability) and the response tendency. Individual differences observed, with regard to self-desirability and the response tendency, could serve as a personality measure (Nunnally *ibid*). Some variance may be attributed to the personality traits.

Hypotheses of interfactorial heterogeneity, with respect to the status of self-adjustment, are nullified. This could well mean that the differences among the factors, with regard to the state of adjustment, are not very high. Self-inventories are more likely to differentiate the "extreme" groups e.g., normal vs. psychotic group or well-adjusted vs. the severely maladjusted (Nunnally *ibid*). The persons of the factors do not belong to such extreme groups, and the scale may not measure the moderated differences. Overcontrol and suppression and the experienced anxiety, on which significant differences are observed, perhaps belong to the tendency of self-disclosure or other personal characteristics. Significant differences are observed mainly with regard to desirability and the response tendency. Factor II reveals greater self-desirability in ratings. Factor III reveals more neutral ratings, which indicates a tendency for response suppression, or a problem in self-disclosure. Factor I does not reveal a typical pattern with regard to response tendency or desirability.

It can be ascertained only by repeated investigations, whether the observed patterns are specific to this instruments, or if they relate to the personality characteristics or traits. Furthermore, it needs to be verify if these patterns will be observed in another sample formed on the basis of similar DMT response characteristics. However, as the differences are statistically significant even in the groups of such small size, they deserve serious attention. Further, as discussed below, the observed differences are to some extent in line with the factors interpretation, regarding the defensive organization.

Differences are observed largely between factor II and III. They differed significantly with regard to the self-ratings for overcontrol and suppression, experienced anxiety, ratings on the desirable and undesirable statements, and the response tendency for neutral ratings. It is assumed that the differences observed between the representatives of factors II and III are related to the defensive organization of the two factors, as identified by the DMT variables. Persons of factor II, on the statements of overcontrol and suppression, rate themselves lower when compared with those of the other two factors. The findings of high transference behaviour loading also substantiate the interpretation of lower overcontrol and suppression, in the case of factor II. Statements of overcontrol and suppression refer to the tendency of controlling and blocking of emotions, poor recall, and levelling of the memory. These tendencies are also considered as some of the behavioural referents of repression and isolation. Persons of factor III presumably block and inhibit the experience and the outward expression of the total affect, while those of factor II presumably distort and transform the affect, but the total affect and the affective expression is expected to be comparatively less inhibited in the latter.

Statements concerning experienced anxiety refer to the experiences e.g., getting startled by noises, having frightening dreams, worrying about little things, becoming anxious if somebody walks behind you, and the like. Persons of factor II rate themselves significantly higher when compared with those of factor III. Since factor III has a significantly greater neutral rating response tendency, we wondered if the neutral ratings accounted for the lower sums of ratings on the statements concerning the experienced anxiety. As the neutral ratings have the value of zero, the sums of the ratings can be affected by them. Analysis of experienced anxiety indicates that there are few neutral ratings on these statements to have affected the comparison of the two factors. At any rate factor III tends to use neutral ratings more frequently on the desirable statements,

and anxiety is not a desirable quality. The experience of frightening dreams or becoming anxious if somebody walks behind you, suggest the presence of projection and the externalization of one's own aggressive impulses, which in turn , lead to the experience of this type of anxiety and fear. The projection of the repressed, sadistic, aggressive impulses in persecutory and fearful dreams is illustrated by Fairbairn (1966, pp. 197-222). Klein's concept of projective identification also refers to the phenomenon of projection of one's own badness and internalized bad objects on others, and consequently identifying them as the bad, the aggressive, and the frightening (Segal 1964). We infer that that the higher sums of the self-ratings on experienced anxiety, in the case of factor II, are related to the defense of projection. The analysis of desirability and response tendency suggest that though factors II and III reveal "defensiveness" in self-ratings, the functional modes of the defensiveness are different. Persons of factor III by rating neutral, suggest that they are blocking and inhibiting the internal reality from appearing in the conscious. Repression and isolation, when compared with other defenses, are assumed to block the perception of the internal reality more completely. Since the individual does not know or cannot say, he selects the neutral. Factor II defends the unacceptable feelings by presenting the desirable. It appears that the neutral rating response tendency is the most crucial factor in the observed differences between factors II and III. Factor II not only obtains higher scores on the desirable statements but also on the undesirable statements. The differences could partly be due to the zero value for neutral ratings, by which factor III obtains scores for both the desirable and the undesirable statements. As opposed to this, the persons of factor II rate themselves in the direction of "like me", which suggests that they tend to present a desirable picture of themselves. The expression of positive feeling towards H, identified as a significant variable in the case of factor II, also suggests a somewhat narcissistic self-image (refer to the

findings of Study 1). However, it cannot be ascertained whether the self-ratings of factor II are simply in accordance with the ego syntonic view -- projection and reaction formation are presumably ego syntonic defenses (Sjöbäck 1973, quoted earlier) -- or , due to falsification of information about one's own self. However, the distortion and covering of the psychological reality appears relatively more prominent than the blocking and inhibiting in factor II. As opposed to this, the persons of factor III more frequently rate neutral on the desirable statements. We speculate that it is the function of repression. Repression is non-ego syntonic, in as much as it does not allow the expression of drives which offer pleasure and satisfaction.

Let us now proceed to the findings obtained by other instruments. Even in therapists' ratings, our assumption regarding high overall ego strength and consequently greater total adaptive abilities in factor I is not verified. It could mean that either the factors are not discriminable with regard to total adaptive abilities or state of overall adjustment, or like in the case of self-ratings, therapists' ratings too have possible limitations in differentiating the groups which are moderately different. Ratings are reported to be affected by the contingent variables such as rater's knowledge of the ratee, rater's rating tendency, range of the scale points, etc. (Guilford 1954, Nunnally 1967). The first variable is not suspected of playing a highly significant role, as the raters are expected to have a reasonable familiarity with their patients. Rating tendency also does not appear to have affected overall results to any considerable degree.

The present scale was a 5-point scale. It could be investigated if a 7-point or a 11-point scale would prove to be more effective for measuring moderate differences with regard to the total adaptive abilities. We do not know if the therapists are "lenient" in rating the patients' adaptive abilities. Furthermore, in the instruction to the therapist, it was not clarified whether "high" and "low" is in comparison of one ability with

another in the same patient, or it is in reference to other patients or normal persons. If a rating scale is to be used, these modifications may be seriously considered. However, a large number of other assumptions are verified by the findings which indicate that the therapists' ratings, on the whole, do differentiate the various groups. Though factor I does not differ significantly from factors II and III, with regard to the total adaptive abilities, it obtains significantly higher sums of ratings for adaptive cognition + empathy ... + recognition and acceptance when compared with factor III. The first two refer to objective knowledge of the reality including the facts and feelings. The third refers to the knowledge of the internal reality i.e., the insight. Objective knowledge of reality and the presence of insight contribute to adaptation by the ego to the demands of the outer and inner reality (Hartmann 1964, pp. 318-350). The remaining four adaptive abilities refer to the ego resources, adaptation to changes in the environment (autoplastic), drive control, and drive expression (ibid, pp. 3-18, 37-68, 318-350), respectively.

The status of greater ego strength, in the case of factor I, could again be inferred from the observation that more persons show improvement on symptomatic and behavioural criteria when compared with those of factor III. The greater incidence of improvement would perhaps indicate relatively greater ego strength.

The lower defensiveness of factor I too is borne out by the therapists' ratings. Factor I obtains lower total defenses ratings when compared with the other two factors. The relative predominance of the distortion-covering defensive organization of factor II is borne out by the finding of significantly higher ratings for projection + reaction formation + turning against self defenses when compared with those of the other two factors. Though factor III does not significantly differ from factor I, with regard to the therapists' ratings on repression + isolation defenses, it does so when compared with factor II. On the basis of the distortion of S and the relative predominance of projection and reaction formation, it was assumed that the reality relation-

ship with the therapist will be more distorted by factor II, thereby contributing to a greater display of emotions and feelings towards the therapist. The assumption is borne out by finding that more persons of factor II obtain high transference behaviour loading when compared with those of the other two factors. In view of the high transference behaviour loading and the low self-ratings on the statements concerning overcontrol and suppression, it is speculated that factor II is comparatively less inhibited in expressing feelings and emotions. They distort the psychological reality, but they express feelings and relate emotionally to the therapist and others; while persons of factor III inhibit expression of emotion and feelings, and withhold relating to the therapist and others.

According to the therapists' report, the persons of factor II are, on the whole, socially very active and mixing types. Could it be that the distortion-covering mode consists of various ways of dealing with the unacceptable object-related aggression, which the individual is defending against? This appears to be a possible common denominator in the three defenses; aggression is projected onto the other person, or distorted into its opposite emotion, or turned against the individual's own self. However, no single defense as yet seems to have been stabilized to deal with the object-related aggression. Conflicts in relationships -- often with the persons of the opposite sex, but at times with persons of the same sex -- are concerned with envy, rivalry, and a dominance-submission theme. In four out of five persons of factor II, there is an explicit reference to aggressive and sexual problems with heterosexual partners. Are they projecting their own aggression onto the heterosexual partner and perceiving him as the aggressor? In their overt behaviour, they are polite and deferential to other people and organize clubs and other activities for social and humanitarian purposes. However, the conflict comes to the surface in close interpersonal relationships, in which the phantasy gains dominance and they tend to become, at times, too submissive domineering or demanding. The relationships

turn into battles. The nature of the conflict suggest the presence of unresolved object-related aggression against which the distortion-covering type defenses are employed but with partial success. However, the person remains in the proximity of the object and allows himself to come closer and get emotionally involved in the relationships. As opposed to this, the persons of factor III tend to avoid, withdraw, and not commit themselves to emotionally involving relationships. In four out of six, there is explicit reference to a tendency for aloofness, noncommitance, floating nature of relationships and certain kinds of "deadness of feelings in the relationships". Three of them are described as "lonely" and "isolated". It appears that they completely avoid the anxiety provoking and/or frustrating "object" rather than allow themselves to get closer to other people and become involved emotionally in a relationship. The pattern is analogous to their mode of complete avoidance of threat perception in the DMT. Factor I appears to have a mixture of both patterns, which are mentioned above, but in a somewhat moderate form. There are references to fear and apprehension in relationship with persons of opposite sex and, at times, a tendency to avoid emotional involvement, but there are parallel references to pleasant and warm relationships. The observation tallies with the defense signs coded in the DMT; the signs are low, distributed in a way that they do not form a dominant pattern, and defensive processes do not interfere excessively with the reality-adequate functioning.

The drives and the personality correlates of the various functional modes of defenses can also be inferred from the interview material. Factor II gives an impression of a generally high drive and energy level. Descriptions such as "voracious", "energetic", "with terrific sense of humour", "rebellious", "controlling", "with lot of drive and energy", "a greater organizer", etc., are given in the reports.

As opposed to this, factor III is characterized with blocking and inhibition of the drive. The general flavour is of passivity, rigidity, and inhibition of expression. Descriptions such as "very reserved", "passive and quiet", "rigid person",

"inhibited and fearful", "passive", "docile", and the like, are given in the reports.

Persons of factor I, unlike those of factor II, are infrequently characterized by high drive and energy level, nor are there very frequent references to passivity, rigidity and inhibition as was in the case of factor III. On the whole, one gets an impression that they are sensitive, feelingful, composed "at least on the surface" (as one therapist puts it!), and esteemed by their colleagues for their work abilities.

The persons of factor II may take somewhat longer before a realistic working relationship is established, but they are more accessible to treatment than would be the representatives of factor III. They are more expressive, their phantasies are accessible, they enter sooner into a transference relationship. In other words, they tend to produce a lot of "material" which could be exploited for therapeutic purpose.

In factor III, defenses function at a somewhat greater expense of the drive and the ego functions. As they are characterized by passivity and rigidity, they produce very little material which could be directly exploited for therapeutic purpose. Only the "silence" and the "blocking" can be interpreted in the treatment but what is being blocked takes a long time to uncover. Therapeutic relationship, with some involvement, is likely to take longer and the therapeutic change, due to immense blocking and constriction, is likely to be slower.

Improvement during therapy is high in factor I. Since the differences, with regard to this and some adaptive abilities, are observed only between factor I and III and not between factor I and II, it is deduced that absence of T-phase, D-phase and the delayed identification of H is somewhat negatively related with aspects of ego strength and therapeutic success.

High occurrence of total defense signs, in itself, did not show poor adaptive abilities or therapeutic success, as factor II is not differentiated against factor I, with regard to the same. However, meaningful information could be obtained from the analysis of the combination of the defense signs. Distortion and

covering type defenses appear related to a greater tendency for showing more good than bad in one's self and greater display of transference behaviour, less overcontrol and suppression and experience of anxiety presumably related to projection of unresolved aggression, which is likely to be channeled in therapeutic relationship. Blocking and inhibitory type defenses appear related to a greater tendency for response suppression, greater overcontrol and suppression of affect and low transference behaviour, indicating that factor III is associated with characteristics which are less favourable to therapeutic success.

The combination of defenses identified as characteristic of factors II and III are rated high by therapists which suggests that some DMT defense signs correspond to the actual defenses. Furthermore, as the low occurrence of total defense signs in factor I corresponds with overall defense ratings by therapists, the total occurrence of defense signs may be taken as an indicator of overall defensive activity in an individual.

For prediction of the treatment process, some questions need to be examined such as: how does the transference develop in patients with distortion-covering type defensive organization in the DMT, when compared with those with blocking and inhibitory defensive organization? Is the cluster of DMT variables observed in factor I, also related to a faster rate of therapeutic change? Could we, at the outset of therapy, predict the therapeutic success on the basis of high perceptual achievement? Is lower defensiveness, without high perceptual achievement, a positive or a negative indicator for personal adjustment and recoverability? etc.

DMT appears promising for screening of patients, for taking decisions on psychotherapy and for initial psychotherapeutic planning i.e., it may be used to decide whether psychotherapy would be a treatment of choice for a particular patient and if so, to provide a focus and a tentative dynamic formulation in terms of critical experiences and the defenses against them. It may also prove to be of some value in brief

psychotherapy (Malan 1976) and short term work in which, unlike the long term work, the therapist starts with a tentative dynamic formulation of the patient's problem. In the meantime, the questions concerning the precise relationship between the DMT variables and the treatment variables, certain phase content of DMT with the object-relations, and the present relationship with the therapist, must be examined. This investigation points the direction for such hypotheses which must be tested in future for an effective application of DMT in preliminary evaluation for psychotherapy. This is invariably the outcome of an inquiry as Bellak (1961) states: "almost every attempt at validation leads to new questions, additional hypotheses, and eventually to new answers. It is the essence of scientific progress, and as such, is the direct opposite of academic boondoggling" (p. 98).

SUMMARY

The purpose of this investigation was to determine measures for analysis of such personality variables as the individual's self-organization and object-relations. A percept-genetic technique, notably the Defense Mechanism Test (DMT) was selected as it consisted of an object-relations theme of early anxiety for the purpose of eliciting the individual's perceptual responses to this theme at various levels of awareness. The validity of the DMT variables for identifying disturbed aspects of self-organization and object-relations, was evaluated against the personal and clinical data. The sample consisted of 27 patients and 19 therapists from whom the former were receiving individual psychodynamic psychotherapy. Evaluation of the validity was attempted in two studies.

Study 1

Relationships between the two sets of variables i.e., the DMT and the personality variables, were predicted. Clinical "signs" were used as criteria for determining the presence or absence of personality variables in each patient from the therapists' interview data on the patients' psychopathology, psychodynamics, familial background, historical development, treatment process, characteristic defenses, and psychological strengths and weaknesses. Fisher's exact probability test (2x2 tables) was applied to observe if the patients with or without DMT variables significantly differed with regard to various aspects of disturbed self-organization and object-relations. The lambda index (Goodman and Kruskal) was used to test the predictive association between statistically related DMT and personality variables. Predictive validity was observed in the case of atypical opposite sex identification of the central figure (H), double percepts, perception of a threatening H, size change percepts, turning against self, projection and regression signs, darkness percepts, and the detailistic percepts. They were valid, in that order, for the following personality variables: prolonged

libidinal relationship with the opposite sex parent, narcissistic fear of objects, physical anxiety and aggressive response, labile self-image, turning against self, projection and regression defenses, depressive and obsessive conditions. Although two variables, perception of H in danger and expression of negative feeling towards H, were statistically related with the early experience of physical anxiety and negative self-image of the individual but no predictive association between the two sets of variables was observed.

Thus, the DMT variables may be considered valid for analysis of the aspects of disturbed self-organization, particularly the traumatic self-experiences, disturbed self-image, and defenses. In several of the significant variables, the percept-genesis of H appears as a prominent factor.

Study 2

The purpose was to analyse the relationship between the DMT factors and the personality variables. The responses of the patients for 78 DMT variables were utilized for Q-analysis. D(W) index (Risberg) was used to identify the significant discriminatory variables for each of the Q-factors extracted from the analysis. It was to be examined if the factors were discriminated with regard to personal-clinical characteristics. The latter were measured by patients' self-ratings of their adaptive and nonadaptive behaviour, ratings by the therapists of patients' adaptive abilities and defense mechanisms, and the checklists for analysis of transference behaviour and improvement observed during the therapy.

Three factors, which contributed 35% of the total variance, were selected for a further analysis. Factor I, consisting of high perceptual achievement and a low total of defense signs in the DMT, was interpreted as the one with "high" ego strength and overall "low" defensiveness. Factor II, consisting of a high total of defense signs, dominance of projection, reaction formation, and turning against self signs, expression of positive

feeling towards H, and poor identification of the peripheral figure (S) in the DMT, was interpreted as the one with "moderate" ego strength, overall "high" defensiveness, and dominance of distortion and covering type defense. The latter refers to projection, reaction formation, and turning against self defenses which distort or disguise the mental content against which they are employed. Factor III, consisting of generally low perceptual achievement and lack of threat-perception in the DMT, was interpreted as the one with "low" ego strength, overall "high" defensiveness, and dominance of blocking and inhibitory type defense. The latter refers to repression and isolation which block or prevent the defended mental content from appearing in the consciousness.

Hypotheses, in accordance with factors interpretation, were postulated with regard to the personal-clinical characteristics. Tests of significance ('t' test and Fisher's exact probability test), were applied to compare the factors with regard to these characteristics.

Significant differences were observed for the following: On self-ratings; factor II had lower self-ratings for over-control and suppression, higher ratings for anxiety, higher sums of ratings on desirable statements indicative of "showing more good than bad of one's self i.e., self-desirability. Factor III showed greater tendency for "neutral" ratings indicative of "response suppression".

On ratings by therapists; factor I had higher sums of ratings for adaptive abilities, viz. adaptive cognition + empathy and emotional understanding + recognition and acceptance indicative of objective knowledge of outer reality and greater insight. It had lower overall defense ratings. Factor II had higher sums of ratings for distortion and covering type defenses and factor III received higher sums of ratings for blocking and inhibitory type defenses.

On the transference behaviour checklist, factor II showed a greater display of transference behaviour.

On the improvement criteria checklist, factor I showed greater

improvement during therapy.

It was deduced from the findings that high perceptual achievement did not indicate overall ego strength but certain aspects of it, notably the objective knowledge of reality and personal insight. Absence of threat perception (no T-phase and D-phase) and poor identification of H was negatively related with therapeutic success and those aspects of ego strength which refer to the objective knowledge of the outer and the inner reality. Dominance of projection, reaction formation and turning against self signs, along with poor identification of S, corresponded with greater display of transference behaviour and a greater tendency for the desirable presentation of one's self. Dominance of repression and isolation signs, along with poor identification of H and threat-perception, corresponded with blocking of affect and the tendency for response suppression. The total occurrence of defense signs indicated the intensity of overall defense of a patient.

The Q-factors, formed on the basis of the DMT variables, were discriminated against one another, when compared with criteria for the personality variables. It was considered that they were not only specific to the DMT response characteristics but they were also "general". The factors, in their relationship with the personal-clinical characteristics of the individuals, appeared meaningful for clinical application. In the future, they may be examined, on the one hand for a differential validity of factors for identifying the treatment groups at various stages of recovery, and on the other, for a more specific and predictive relationship between the sets of the DMT and personality variables which appeared related in this exploratory study.

It was concluded from the two studies that DMT may be exploited for the screening process of patients for certain aspects of disturbed self-organization, such as self-image, ego strength, defenses, and to some extent that of disturbed environmental object-relations. As these aspects are of significance in evaluating the suitability of a patient for psychotherapy and for planning a tentative focus for therapeutic work, the test may be applied profitably in a psychotherapy setting.

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Appendix A: A.N.B. Self-Rating Scale

Here are some statements which a person might make about himself, you may mark on the scale how each statement is related to you.

The two ends of the scale are:

exactly like me _____: _____: _____: neutral _____: _____: _____: extremely unlike me

How to use the scale

As you read a statement and you think that is 'exactly like me' then mark a cross at that end of the scale, e.g.

exactly like me X _____: _____: _____: neutral _____: _____: _____: extremely unlike me

and similarly if you think that is 'extremely unlike me' then mark at that end, e.g.

exactly like me _____: _____: _____: neutral _____: _____: X _____: extremely unlike me

If you feel that the statement is quite closely related, to one or the other end of the scale (but should not be marked at the extreme end itself), you should mark next to that end, e.g.

exactly like me _____: X _____: _____: neutral _____: _____: _____: extremely unlike me

or

exactly like me _____: _____: _____: neutral _____: X _____: _____: extremely unlike me

If the statement seems only slightly related to one side as opposed to the other side then you should mark as follows:

exactly like me _____: _____: X _____: neutral _____: _____: _____: extremely unlike me

1. 'I would like to know all the facts no matter how unpleasant they may be'.
2. 'My relaxed and humorous approach helps me to come to grips with the situation'.
3. 'Ideas and thoughts just pop up in my mind'.
4. 'My thoughts get muddled'.
5. 'I am free from prejudices of any kind'.
6. 'I hardly know what I feel'.
7. 'I make attempts to know completely the problem I am fighting'.
8. 'I feel that people are always getting at me'.
9. 'I don't know why I do the things I do'.
10. 'I am good at foreseeing if there is anything important in the offing'.
11. 'Despite my efforts sometimes things go wrong because circumstances are against me'.
12. 'I fight adversity rather than let it overtake me'.
13. 'I get startled by sudden noises'.
14. 'I listen to other people's ideas of right and wrong but in the end my action is my responsibility'.
15. 'I am an easy-going person'.
16. 'I blame myself if things go wrong'.
17. 'I may have sexual phantasies for someone who is just a colleague of an acquaintance'.

18. 'I have many faults'.
19. 'I do things in an orderly way, step by step'.
20. 'No matter how unkind people have been to me, I forgive them'.
21. 'I am responsible for my mistakes'.
22. 'I can work with concentration'.
23. 'I have never felt absolutely furious with anybody'.
24. 'In a crisis I am inactive, riddled with doubts and indecision'.
25. 'I have interests and hobbies which offer me satisfaction'.
26. 'When things go badly I get run down'.
27. 'I have frightening dreams'.
28. 'When I am upset I can no longer imagine what others feel or think'.
29. 'I get frightened by the slightest violence'.
30. 'I tackle problems rather than ignore them'.
31. 'I sometimes feel like doing away with myself'.
32. 'I get annoyed that most of the people I meet are the same type of person'.
33. 'Little things worry me'.
34. 'I can imagine what others would feel in a given situation'.
35. 'I never put off until tomorrow what I ought to do today'.

36. 'When things go wrong, I know how much it is my fault and what is due to other people and circumstances'.
37. 'I laugh at a dirty joke'.
38. 'When I am angry or upset about something, I wait until the right time and place before I show it'.
39. 'I can guess how other people will react to what I say or do'.
40. 'I do not have any disagreeable thoughts or feelings'.
41. 'I can keep cool'.
42. 'When I am angry I can show it without flying off the handle'.
43. 'I very often feel uneasy as if trouble is brewing'.
44. 'I can't pin down what I mean'.
45. 'I just can't bear things to be untidy or messy'.
46. 'I feel that people I meet are looking at me critically'.
47. 'I tend to forget specific details, dates and so on'.
48. 'I have continually tried to overcome my faults'.
49. 'I am thought of as a relaxed and easy-going person'.
50. 'I do not seem to feel as other people do'.

51. 'I believe in making the best of bad situations if I can't change them'.
52. 'I feel on top of the world'.
53. 'I find that even strangers react to me in a certain way'.
54. 'I feel that things will take care of themselves'.
55. 'I take account of other people's feelings in my relationships'.
56. 'Looking back I have had ups and down but life is better than ever'.
57. 'I get easily distracted'.
58. 'I am considered as an active outgoing person'.
59. 'I find it difficult to remember specific events and facts'.
60. 'I pursue my goals with single-minded determination'.
61. 'I wish I were a child without problems or anxiety'.
62. 'When I am in an emotional situation, I can stand back and see all points of view'.
63. 'I take into consideration other people's ideas of right and wrong'.
64. 'I am full of doubts and indecision'.
65. 'My train of thought is intruded upon by other thoughts'.
66. 'I take into account both the present and the future before deciding what to do'.

67. 'I find that some people are against me for no apparent reason'.
68. I cannot cope'.
69. 'I become easily depressed'.
70. 'I keep a cool head even when things are going badly'.
71. 'I feel a sexual attraction towards a person in the street or in a social gathering'.
72. 'I keep brooding over the past'.
73. 'I am interested in what is going on in my neighbourhood and in the world'.
74. 'Instead of getting angry, I become depressed'.
75. 'I day-dream a lot'.
76. 'I am confident that I can see my problems through'.
77. 'I become very anxious when somebody is walking behind me'.
78. 'I rely on others completely when I am in trouble'.
79. 'I do make plans for the future'.
80. 'I try hard to listen to what is being said but my mind wanders'.
81. 'When I want to explain something, I can hit the nail right on the head'.
82. 'My ideals and values are important to me'.
83. 'I like using long words and technical terms'.

84. 'In a difficult position I might be at a loss but I soon recover and deal with it'.
85. 'I can size up a situation really well'.
86. 'Whatever happened in the past, I can pull through and work for the present'.
87. 'I always answer a personal letter as soon as I have read it'.

Statements referring to various subdimensions of adaptive and nonadaptive behaviour.

<u>Adaptive attitudes</u>	2, 12, 14, 15, 18, 19, 21, 30, 41, 48, 49, 51, 55, 56, 58, 63, 66, 70, 76, 79, 84, 86, (total 22 statements)
<u>Adaptive-cognitive</u>	1, 7, 10, 34, 36, 39, 62, 85. (total 8 statements)
<u>Adaptive control-expression</u>	22, 25, 38, 42, 60, 73, 81, 82. (total 8 statements)
<u>Anxiety</u>	13, 27, 29, 33, 77. (total 5 statements)
<u>Maladaptive response</u>	16, 24, 26, 31, 52, 54, 61, 64, 68, 69, 72, 74, 75, 78. (total 14 statements).
<u>Dyscognitive-evaluative</u>	3, 4, 6, 8, 9, 11, 28, 32, 43, 46, 50, 53, 57, 65, 67, 80, 83. (total 17 statements).

Overcontrol and suppression 20, 23, 44, 45, 47, 59
(total 6 statements).

Total adaptive behaviour 38 statements

Total nonadaptive behaviour 42 statements

Note: remaining 7 statements were only introduced for the purpose of cross checking.

Statements Classified as Desirable, Undesirable, and Neutral

Desirable statements

1, 2, 5, 7, 10, 12, 14, 15, 19, 20, 22, 23, 30, 34, 35, 36, 38, 39, 40, 41, 43, , 48, 51, 52, 55, 56,
58, 60, 62, 63, 66, 70, 73, 76, 79, 81, 82, 84, 85, 86, 87
(total 42 statements)

Undesirable statements

4, 6, 9, 13, 18, 24, 26, 27, 28, 29, 33, 43, 44, 47, 57, 59, 64, 65, 68, 69, 71, 72, 74, 75, 77, 78, 80
(total 27 statements)

Neutral statements

3, 8, 11, 16, 17, 21, 25, 31, 32, 37, 45, 46, 50, 53, 54, 61, 67, 83
(total 18 statements).

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Appendix B: DMT Variables Included for D-(W) Index (Q-factor) Analysis.

(Computer takes only positive and negative values (i.e. 1 or 0). In order to make the data suitable for computer feeding, the critical thresholds were determined on the basis of our exploratory work with personal patients. The data was then fed by assigning the value of 1 to those patients who met the criteria and the value of 0 to those who did not).

Perceptual Achievement

1. P-phase on 2nd exp. or later series I.
2. P-phase on 2nd exp. or later series II.
3. H's identification on 15th exp. or later series I.
4. H's identification on 13th exp. or later series II.
5. S' identification on 18th exp. or later series I.
6. S never identified series II.
7. H's sex correctly identified on 9th exp. or later series I.
8. " " on 8th exp. or later series II.
9. H's age correctly identified on 11th exp. or later series I.
10. " " on 10th exp. or later series II.
11. S' sex correctly identified on 15th exp. or later series I.
12. " " on 16th exp. or later series II.
13. S' age correctly identified on 14th exp. or later series I.
14. " " on 15th exp. or later series II.
15. H's very first identification on 14th exp. or later series I.
16. " " on 13th exp. or later series II.
17. S' very first identification on 18th exp. or later series I.
18. " " on 18th exp. or later series II.
19. S-phase on 6th exp. or later series I.
20. " on 6th exp. or later series II.
21. No S-awareness in absence of S-identification series II.
22. H's object not identified series I.
23. " " series II.
24. No H's object awareness in absence of object-identification series I.
25. " " " series II.
26. External object-identification on 9th exp. or later series I.
27. No D-phase in absence of T-phase series I.
28. " " series II.
29. No T-phase series I.
30. " series II.
31. No C-phase series I.
32. " series II.

Compared to series I, while stimulus attributes of H were identified earlier in series II, but stimulus attributes of S were identified later. Therefore while the critical exposures for identification of H are lowered in series II, these are raised for identification of S.

Defence-Signs Measure

33. Repression sign both series 4 or more.
34. Isolation " " 4 or more.
35. Denial " " 1 or more.
36. Reaction -formation sign both series 4 or more.
37. Identification with aggressor sign both series 4 or more.
38. Turning against self " " 2 or more.
39. Projection " " 4 or more.
40. Regression " " 1 or more.
41. Inter-serial correspondence for repression.
42. " " for isolation.
43. " " for denial.
44. " " for reaction-formation.
45. " " for identification with aggressor.
46. " " for turning against self.
47. " " for identification with opposite sex.
48. " " for polymorphous identification.
49. " " for projection.
50. " " for regression.
51. Total defense signs (excluding def. 7 and def. 8) II or more.
52. In late phase repression sign 1 or more.
53. " isolation sign 2 or more
54. " denial sign 1 or more.
55. " reaction-formation sign 2 or more.
56. " identification with aggressor sign 1 or more.
57. " turning against self sign 1 or more.
58. " identification with opposite sex sign 4 or more.
59. " polymorphous identification sign 4 or more.
60. " projection sign 1 or more.
61. " regression sign 1 or more.
62. Total defense signs (excluding def. 7 and def. 8) in each series 2 or more - in the late phase.
63. Total defense signs (excluding def. 7 and def. 8) both series combined 7 or more in the late phases.

Content-Analysis

64. Atypical younger-age identification of H
65. Atypical older-age identification of H
66. Atypical opposite-sex identification of H
67. Atypical younger-age identification of S
68. Atypical opposite-sex identification of S
69. Positive feeling expressed toward H
70. Negative feeling expressed toward H
71. H Perceived in danger by 10th exp. in either series.
72. H perceived threatening
73. H perceived smiling with or without cheerful atmosphere
74. S-dystonic percept
75. Double perception of H or S
76. Detailistic percepts.
77. Darkness percepts twice or more in both series combined
78. Size-change percepts twice or more.

Appendix C: Interview Content Analysis Schema

Present Status

(tick the categories which apply)

A Self-Image

1. Negative self-image: (belittling oneself, selfdenigration, expression of incompetence, inadequacy, worthlessness, self-blaming etc.)
2. Positive self-image: (Self-confidence, self-reliance, self-assuredness etc.)
3. Over-valuated self-image: (over confidence, self-opinionated, grandiose ideas, unrealistic assessment of one's abilities etc.)
4. Labile self-image: (sudden and numerous shifts from diffidence, inadequacy and worthlessness to confidence, adequacy and competence, and vice-versa)

B Adult-genitality

1. No history of genital act with a heterosexual object.
2. No history of genital act with homosexual object.
3. Bisexual stage of genitality.
4. Infantile stage of sexuality.
5. Adult genital stage not attained.

C Work

1. No psychological investment in work
2. Lack of commitment to work
3. No gainful employment (in case of the male patients).

Events and Situations

The categories of events and situations are to be noted for various life-phases. Following signs are used to signify the life phases:

C = childhood (up to 6 years of age).

B = "boyhood" 7-12 years

A = adolescence or adulthood

P = presently (if it applies to the present)

Mark the events and situations which are repeated and write the life phase/s sign (C,B,A or P) against it.

Events and situations

Life phases

I. Parental death:

same-sex parent
opposite-sex parent
both

2. Patient separated from:

same-sex parent
opposite-sex parent
both

3. Patient lived with:

father-surrogate
mother-surrogate
same-sex parent
opposite-sex parent
both

4. Parental separation:

separation
divorce
desertion

5. Parental psychiatric illness:

same-sex parent psychiatrically ill
opposite-sex parent " "
both

6. Parental serious physical illness or calamity (eg. seriously hurt or injured).
 - same-sex parent
 - opposite-sex parent
 - both
7. Patient admitted to an institution: ,
 - boarding school/children's home (other child care institutions etc)
8. Parent-Parent relationship: .
 - happy and pleasureable
 - marital tension, rows, quarrels etc
 - violence and cruelty between the partners
 - do not relate to each other

Individuals Self-experience and relationship with the objects

The categories of individual's self-experience and relationship to the object are to be noted for various life-phases. Following signs are used to signify the life-phases).

- C = childhood (up to 6 years of age)
- B = boyhood (7-12 years)
- A = adolescence or adulthood
- P = presently (if it applies to the present)

Mark the categories of self-experience and relationship with the objects which are reported and write the life phase/s signs (C,B,A or P) against it.

Relationship with the objects	life phases
-------------------------------	-------------

- | | | |
|---|---|--|
| A | With the opposite sex parent | |
| | 1. warm and close relationship | |
| | 2. over dependence and clinging | |
| | 3. erotic (sexual phantasies, masturbatory phantasies, etc). | |
| | 4. incestuos relationship (an actual incestuos act). | |
| | 5. a. aggressive behaviour | |
| | b. rage-relationship (throwing tempers, getting into a rage, etc) | |
| | c. dislike and hatred | |
| | 6. a. anxious and fearful | |
| | b. repeated phantasies of being attacked or injured by the parent | |
| | 7. Physical retaliation against the parent | |
| | 8. Cold, indifference, non-attachment etc. | |

B With the same sex parent

Life phases

1. warm and close relationship
2. overdependence and clinging
3. a. aggressive behaviour
b. rage relationship (throwing tempers, getting into a rage, etc).
c. dislike and hatred
4. a. anxious and fearful
b. repeated phantasies of being attacked or injured by the parent
5. physical retaliation against the parent
6. cold, indifference, non-attachement etc.

C Behaviour to Other Objects

1. positive-approaching
2. aversive, non relating
3. fearful, anxious
4. angry, aggressive, hostile etc.

D General Self-experience

1. anxiety manifestation (anxiety, panic, fear of being hurt, injured etc.)
2. neurotic disturbances (terror dreams, thumb sucking, nail biting, bed wetting etc.)
3. emotional deprivation
4. depression
5. guilt
6. physical trauma, serious illness, accident, injury etc.
7. temper tantrums, rages, violent behaviour etc.
8. happy, pleasureable experience

E Self-Cathexis

1. Positive
 - a. reasonable self-interest and self-care
 - b. narcissistic, self indulgent
2. Negative. Self-dislike, carelessness with regard to self, attempt to hurt oneself etc.

Objects' Relationships with the Individual

The Categories of objects' relationships with the individual are to be noted for various life-phases. Following signs are used to signify the life-phases.

C = childhood (up to 6 years of age)

B = boyhood (7-12 years)

A = adolescence or adulthood

P = presently (if it applies to the present)

Mark the categories of objects's relationships with the individual, which are reported, and write the life phase/s sign (C,B,A or P) against it.

Objects' Relationships

life-phases

A Opposite-sex parent towards the patient

1. warm and close relationship
2. neglectful
3. indifferent (aloof, withdrawn, non relating, depriving etc)
4. sexually provocative and seductive
5. aggressive and hateful
6. physically violent and cruel
7. severe emotional inconsistency

B Same-sex parent towards the patient

1. warm and close relationship
2. neglectful
3. indifferent
4. sexually provocative and seductive
5. aggressive and hateful
6. physically violent and cruel
7. severe emotional inconsistency

Appendix D. Adaptive Abilities (A.A.) Rating Scale

(Therapist's ratings of the patient's adaptive abilities)

Adaptive abilities are those which enable a person to find adequate solutions to the problems by dealing positively and effectively with this environment. Below, we have listed a few adaptive abilities which contribute to an individual's adaptive behaviour. People manifest different levels of strength and effectiveness of these abilities in their behaviour.

We request you to indicate the strength and effectiveness of the adaptive abilities of your patient on a 5-point scale.

The 5-point scale is from "low" to "high":

1	2	3	4	5
low				high

Below are the adaptive abilities and the 5-point scale. Encircle the point on the scale which as per your judgement applies most closely to your patient.

<u>Adaptive abilities</u>	<u>Ratings</u>				
1. Ability to cognize and evaluate facts even in a distressing situation	1	2	3	4	5
2. Ability to empathize and understand other people's emotions and feelings	1	2	3	4	5
3. Ability to recognize and accept one's weaknesses and limitations and take criticism in the right perspective	1	2	3	4	5
4. Ability to depend on oneself in a crisis and other distressing situation	1	2	3	4	5
5. Ability to adapt oneself to the "changes" and "demands" of the situation, if adaptation is in the best interest of the individual	1	2	3	4	5
6. Ability to express the sexual and the aggressive impulses in constructive and socially acceptable channels	1	2	3	4	5
7. Ability to control and postpone the sexual and the aggressive impulses if that is in the best interest of the individual	1	2	3	4	5

Appendix E: Defense Mechanisms Rating Scale

(Therapist's rating of the patient's defense mechanism)

Some of the major defense mechanisms are listed in this scale. People have different levels of the "intensity" and the "pervasivity" of these defenses.

We request you to indicate the intensity and pervasivity of the patient's defenses on a 5-point scale.

The 5-point scale is from "low" to "high".

1	2	3	4	5
low				high

Below are the defense mechanisms and the 5-point scale. Encircle the point on the scale which as per your judgement applies most closely to your patient.

<u>Defenses</u>	<u>Ratings</u>				
Repression	1	2	3	4	5
Isolation	1	2	3	4	5
Denial	1	2	3	4	5
Reaction Formation	1	2	3	4	5
Turning Against Self	1	2	3	4	5
Projection	1	2	3	4	5
Regression	1	2	3	4	5

Appendix F: Transference Behaviour Checklist

Positive Transference Behaviour

1. Idealization
2. Phantasization
3. Dependence and clinging behaviour
4. Demanding and controlling behaviour
5. Seductive behaviour
6. Sexual feelings and phantasies
7. Expression of loving and warm feelings
8. Placatory
9. Deferential
10. Separation painful
11. Identification
12. Curiosity in the private life of the therapist

Negative Transference Behaviour

1. Angry-aggressive feelings
2. Frustration-dissapointment
3. Rivalry-competition
4. Accusatory behaviour
5. Envy and jealousy
6. Distrust-suspicion
7. Hostile (raging, violent expressions)
8. Attribution of hostile motives to the therapist
9. Angry silence,
10. Ambivalence

Emotive Behaviour

1. Expression of depression, sadness, crying etc.
2. Expression of anxiety and fear
3. Acting outside the transference
4. Compulsion to repeat an early object relation theme

Transference - Avoidance Behaviour

1. Feelingful relationship, not established
2. Resistance to transference
3. Denial of emotional involvement

Appendix G: Improvement Criteria Checklist

1. Symptom Relief (Symptomatic Criteria)

(tick mark the symptoms which have been relieved)

- anxiety, panic
- obsessive phenomena
- compulsive phenomena
- depression
- psychosomatic symptoms
- sexual problems
- relationship problems
- relief in any other symptoms for which patient referred

2. Psychodynamical Improvement (Dynamic Criteria)

(tick mark the ones in which improvement has been noticed)

- reality testing
- impulse control
- impulse regulation
- object relations
- structural or characterological personality changes
- any other improvement in the postulated dynamic formulation of the patient's problem.

3. Positive Behavioural Changes (Behavioural Criteria)

(tick mark the ones in which improvement is noticed)

- social relationship behaviour
- close relationship behaviour
- work-behaviour
- hetero-sexual behaviour
- expressivity of feeling
- frustration-tolerance
- insightful behaviour

"Satisfactory Improvement"

1. There must be an improvement in "psychodynamical criteria".
2. The psychodynamical improvement must be accompanied with either "symptom relief" or "positive behavioural changes".

Note: While close relationship behaviour refers to the improvement in direction of a conflict-free emotional relationship with close friends, parents, spouse, etc., heterosexual behaviour refers to the improvement in a mutually satisfying adult-genital behaviour with the opposite partner.

